

CURRICULUM VITAE



1. PERSONAL INFORMATION

Name : DAYANG NORHAYATI ABANG JAWAWI

Citizenship : Malaysian

Date of birth: 09 December 1972

Marital status: Married

Office : School of Computing,
Faculty of Engineering,
Universiti Teknologi Malaysia,
81310 UTM Skudai, Johor, Malaysia

E-mail : dayang@utm.my

Telephone : 07-553 2009 (office)

Fax : 07-5538822

2. ACADEMIC QUALIFICATIONS

- 2006 Doctor of Philosophy (PhD) in Computer Science, Department of Software Engineering, Universiti Teknologi Malaysia, Malaysia.
Thesis title: "A Framework for Component-Based Reuse for Autonomous Mobile Robot Software"
- 2000 Master of Science (M.Sc.) in Computer Science, Department of Software Engineering, Universiti Teknologi Malaysia, Malaysia.
Thesis title: "The Development of Real-Time Control Firmware for a Wall Climbing Robot - A Small-Scale Embedded Hard Real-Time System"
- 1996 Bachelor of Science (Hons) in Software Engineering, Computing and Management School, Sheffield Hallam University-Sheffield, United Kingdom.

1992 A Levels, Center for Preparation of Education Malaysia (PPP/ITM), Shah Alam, Selangor, Malaysia.

3. EMPLOYMENT

Jan 2021 - now	Professor School of Computing, Faculty of Engineering, Universiti Teknologi Malaysia, Skudai, Johor.
Nov 2012 – Dec 2020	Associate Professor, Department of Software Engineering, Faculty of Computing, Universiti Teknologi Malaysia, Skudai, Johor.
Nov 2008 – Oct 2012	Senior Lecturer, Department of Software Engineering, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia, Skudai, Johor.
Sep 2000 – 2008	Lecturer, Department of Software Engineering, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia, Skudai, Johor.
Jun 1997 – Sep 2000	Tutor, Department of Software Engineering, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia, Skudai, Johor.
Jul 1994 – Aug 1995	Programmer, IBM Healthcare Solutions, Warwick, United Kingdom

4. RESPONSIBILITIES

July 2018-now	Associate Chair (Academic and Student Development), School of Computing, Faculty of Engineering.
Feb 2017– June 2018	Deputy Dean (Academic and Student Development) Faculty of Computing, UTM

Julai 2015 – Jan 2017	Head of Software Engineering Research Group (SERG) Faculty of Computing, UTM
Nov 2009 – Feb 2015	Head of Software Engineering Department Faculty of Computing, UTM
July 2006 – Sept 2009	Computer Science Program by Research Coordinator (M.Sc and Ph.D) Faculty of Computer Science and Information Systems, UTM
Mar 2002 – Oct 2002	Deputy Coordinator I for Msc. IT Enterprenur Program Faculty of Computer Science and Information Systems, UTM
2001 – Oct 2002	Coordinator for Department's Colloquium
Aug 2007 – 2008	Department of Software Engineering Faculty of Computer Science and Information Systems, UTM

5. TEACHING EXPERIENCE

5. 1. Postgraduate Courses

MCSQ1103 Software Engineering Research Methodology
 MCB1163 Hardware, Software & Creative Content
 MCC1023 Advanced Data Structures and Algorithms
 MCC1093 Advanced Software Engineering
 MCT1223 Real-Time Systems
 MCP1653 Real-Time Software Engineering
 MCP0003 Computing Fundamentals

5. 1. Undergraduate Courses

DCP1123 Programming Technique II
 DEU 1213 Digital Logic
 DCP2043 Data Structures & Algorithms
 SMM1262 Calculus
 SCJ1013 Programming Technique I
 SCK1223 Programming Technique II
 SCJ1023 Programming Technique II
 SCK1233 Software Engineering
 SCP 3093 Software Engineering
 SCJ2013 Data Structures & Algorithms

SCP2073 Basic Engineering Computing
 SCK2243 Data Structures & Algorithms
 SCK3293 Real-Time Software Engineering
 SCM 4423 Office Automation
 SCP4203 Software Quality Assurance
 SCJ4363 Software Project Management
 SCP4223 Software Engineering for Real-Time Systems

6. RESEARCH

6. 1. Research Areas

Software Engineering: Software Reuse, Software Requirement and Modelling, Software Quality and Testing
 Embedded Real-time Software
 Computer Programming and Software Engineering Education

6. 2. Research Activities

Project Leader

1. Fellow Research Grant (Vot. 00P27 (RM63,540), "Key Technologies on High-Quality Event Detection through Big Data Mining in Industrial Cyber-Physical Systems", 1 Jul 2022-30 June 2023.
2. UTM High Impact Research Grant (UTMHR) (Vot. 08G67 (RM128,000), "Adaptive Learning Framework Using Educational Robotics for Computational Thinking Education", Jan 2020-Dec 2022.
3. Contract Research-Double Tax Deduction (CR-DTD) (Vot. 4C380 (RM46,000), "A Study on Business Process Improvement for the Department of Justice Syariah Court of Malaysia, Johor", Jul 2020-June 2021.
4. Fundamental Research Grant Scheme (FRGS) (Vot. 5F117 (RM70,500), "A New String Metric to support Effective Test Case Prioritization incorporating traceability mechanisms", Jan 2019-Spet 2021.
5. Transdisciplinary Research Grant (TDR) (Vot 06G25 (RM240,000) "Innovation Platforms and Digital Healthcare for Patient Engagement and Assessment of Care", Dec 2018 – July 2021.
6. Research University Grant (GUP) (Vot 13H63 (RM50,000) "Domain Analysis Software Product Line Model with Pedagogical for Educational Robotics", July 2016 – June 2018.
7. Others Grant (KEJORA) (Vot 4B196 (RM80,000), "Kreativiti Dan Inovasi Melalui Pengaturcaraan Liga Robotik iCare UTM-KEJORA: Kemahiran Penyelesaian Masalah", Jun 2015 – Mei 2017.

8. Research University Grant (GUP) Vot 09H58 (RM35,000) "Development of Agile Transition Model for Non-Agile It Organizations", May 2015 – October 2016.
9. ScienceFund (MOSTI) Vot 4S113 (RM162,000), "End-To-End Cohesive Approach for Agile Software Development in Cloud Computing Environment", March 2015 - February 2017.
10. Others @ VOT 4B224 (RM20,000), "Pemantapan Projek Liga Robotik Icare Utm-Kejora Ke Peringkat Lebih Tinggi", Dec 2015 – Nov 2016.
11. Others Grant (KEJORA) Vot 4B169 (RM22,035), "iCARE Pengaturcaraan ROBOT-LIGA KEJORA", September 2014 – February 2015.
12. Research University Grant (GUP), Vot 05H75 (RM80,000), "A Component-Based Mobile Robotics Application Toolbox for Teaching Programming Skill", April 2014 – March 2016.
13. ScienceFund 01-01-06-SF1111, Vot 4S064 (RM163,840), "Component-based Software Engineering Approach for Automated Embedded Precision Farming Systems", March 2013 - February 2015.
14. Research University Grant (GUP) (RM149,000), "Component-Based Methodology for Embedded Real-Time Software Development of Robotic Wheelchair Systems", April 2011 – March 2013.
15. Key Focus area, "To Study on How to Write High Impact Proposal and Development Proposals and Identify Source of Funds for Engineering", May 2011-July 2011.
16. Fundamental Research Grant Scheme (FRGS) Vot. 3F369 @ VOT 78431 (RM50,000), "A scheduling analysis framework for predicting the weakly hard real-time tasks performance", August 2009-August 2011.
17. ScienceFund Vot. 3S210 @ VOT 79214 (RM199,500), "Tools for Component-Oriented Programming of Embedded Real-Time Software", September 2007-Feb 2009.
18. ScienceFund Vot.3S089 @ VOT 79090 (RM185,000), "Framework for Component-Based Software Engineering of Embedded Software in Resource Constraints Real-Time Systems", December 2006-September 2008.
19. Fundamental Research Grant Scheme (FRGS) Vot.3F093 @ VOT 78094 (Seed Money – RM10,000), "A Generative Reuse Approach for Component-Based Software Engineering", February 2007 – January 2009.
20. SLAB, PHD Research Project, "A Framework for Component-Based Reuse for Autonomous Mobile Robot Software", Robot Systems, Nov 2002 – 2005.
21. UPP-UTM VOT 71848 (RM20,000), "Experimental Evaluation of Hybrid Software Engineering Methodology for Embedded Firmware Development on Intelligence Mobile Robot", Jun 2002-September 2003.
22. UTM, Master Research Project, "The Development of Real-Time Control Firmware for A Wall Climbing Robot - A Small-Scale Embedded Hard Real-Time System", May 1998 - September 2000.

Project Member

1. Networking Grant Vot 4X764 (RM 37,729) "An Aspect-Oriented Model-Driven Code Generation Approach for Improving Reusability and Maintainability". 11 Dec 2021-1 Dec 2022.
2. Quick Win Research Grant Vot 4J564 (RM 48,880) "UTMSPC 1.26: Learning Data Structure and Algorithm Programming Using Augmented Reality". 1 March 2022-28 Feb 2023.
3. UTM Encouragement Research (UTMER) Grant Vot 31J09 (RM 60,000) "A New Segmentation and Localization Method for Improving Iris Recognition in Less Cooperative Environments". 11 Nov 2022-31 Oct 2024.
4. Contract Research-Double Tax Deduction (CR-DTD) Vot 4C473 (RM343,460) "Software Testing and Software Maintenance of Johor State Legislative Assembly Management Information System (e-ADUN)". 1 February 2021-31 March 2024.
5. UTM Encouragement Research, Vot 19J54 (RM56,000), "A New Agility Hybrid Model for Secured IoT-Based Healthcare Platform". 1 October 2020-30 September 2022.
6. Fundamental Research Grant Scheme (FRGS), Vot 5F482 (RM63,000), "A Hybrid GMDH - Artificial Bee Colony Method for High Accuracy Software Effort Estimation". 7 September 2021-6 September 2023.
7. Contract Research-Double Tax Deduction (CR-DTD) Vot 4C456 (RM252640), "Independent Validation and Verification (IV & V) Maintenance Testing of Small and Medium Enterprise High Impact Programme 1 (Sme Hip 1) Integration Project". 1 January 2021-30 June 2022.
8. UTM Encouragement Research, Vot 19J69 (RM56,000), "The Enhancement of Multifactor Weighted Approach for Event Sequence Test Cases". 1 October 2020-30 September 2022.
9. Fundamental Research Grant Scheme (FRGS), Vot 5F475 (RM99,000), "Self Adaptive Service Discovery Theoretical Framework for Dynamic Mobile Environment". 7 September 2021-6 September 2024.
10. Contract Research-Double Tax Deduction (CR-DTD) Vot 4C379 (RM23,000), "A Study on Business Process for Johor Water Regulatory Agency (BAKAJ)". Jul 2020- June 2021.
11. UTM Transdisciplinary Research Grant (UTM-TDR), Vot 05G20 (RM80,000), "UTM-TDR 7.2 (T1): Innovation Communication for Non-Contact Heart Monitoring Using Electromagnetic Wave". 1 December 2018-31 May 2021.
12. UTM Transdisciplinary Research Grant (UTM-TDR), Vot 05G21 (RM40,000), "UTM-TDR 7.3 (T2): Innovation Assessment for Psychiatric Patients Using Technology-Driven". 1 December 2018-31 May 2021.
13. Contract Research-Double Tax Deduction (CR-DTD) Vot 4C193 (RM60,000), "Microservices-Oriented Application for Hospital Management System". May 2018-May 2019.
14. Contract Research-Double Tax Deduction (CR-DTD) Vot 4C317 (RM30,000), "IoT-Based Queueing Management System". Dec 2019-Dec 2022.

15. Prototype Development Research Grant Scheme (PRGS) Vot 4L709 (RM82,680), "GamBot: Educational Game Mobile ROBot for promoting hypothetico-creative reasoning among students". Dec 2019-Feb 2022.
16. UTM Fundamental Research (UTMFR) Vot 21H04 (RM70,000), "ALARM: Learning Analytics Framework to Support Self-Regulated Learning Strategies in Massive Open Online Courses (MOOC) in Reducing Dropout". Jan 2020-June 2022.
17. Others (OTR) Vot 4B487 (RM50,000), "Agola Robotic Software Development". Dec 2019-June 2020.
18. UTM-Encouragement-Research (UTMER) Vot 18J36 (RM30,000), "Quality Driven Approach for Product Line Architecture Customization in Patient Navigation Program Software Product Line". Nov 2019-April 2022.
19. Industry-International Incentive Grant (IIIG) Vot 01M60 (RM20,000) "Integrated Architecture Pattern for Healthcare Domain Using Microservices-Architecture". June 2019 – Nov 2021.
20. Industry-International Incentive Grant (IIIG) Vot 01M55 (RM20,000) "The Design of A Service Oriented Architecture (SoA) For Integration Of Various Hospital Management System Modules". June 2019 – Nov 2021.
21. Research University Grant (GUP) Vot 15J16 (RM20,00), "An Enhanced Software Effort Estimation Using Machine Learning for Big Data Software Development". Feb 2018-May 2019.
22. Research University Grant (GUP) Vot 16H51 (RM40,00), "Predictive Model Using Climate Variables for Prediction of Dengue Incidence in Malaysia". Jul 2017-June 2019.
23. Research University Grant (GUP) Vot 16H73 (RM40,00), "Requirement Analysis Process using Role-based Goal Modeling". July 2017-June 2019.
24. Fundamental Research Grant Scheme (FRGS) Vot 4F836 (RM50,900), "A New Reliability Prediction Model by The Combination of Non-Homogenous Poisson Process and an Artificial Neural Network Based-on Information Fusion Technique", August 2016 - January 2018.
25. Research University Grant (GUP) Vot 15H44 (RM40,000) "Efficient Regression and Prioritization Testing Technique for Educational Technology Software Product Line", October 2016 – September 2018.
26. Others Grant (KEJORA) Vot 4B195 (RM171,700), "Model Perkongsian Ilmu Ke Arah Kelestarian Modal Insan Luar Bandar (KAMIL) Melalui Centre For Advancement in Rural Education Informatics (iCARE) UTM-KEJORA: iCare My Aim & iCare My English", June 2015 – May 2017.
27. Research University Grant (GUP) Vot 11H86 (RM50,000) "Information Fusion of Software Reliability Prediction Model and Meta-Heuristic Approaches for Real Time Embedded Systems", November 2015 – November 2017.
28. Others, Vot 4B225 (RM20,000), "Centre for Advancement In Rural Education Informatics (iCARE): Peningkatan Program Berasaskan Kajian Awal". 1 Dec 2015-30 November 2016.
29. Others Grant (Gates IT Solution Sdn Bhd) Vot 4C083 (RM13,000) "Software Reliability Prediction Accuracy Improvement Using Meta-Heuristic Optimization Techniques", September 2015 – August 2016.

30. Others Grant (KEJORA) Vot 4B170 (RM21,450), "Centre for Advancement in Rural Education Informatics: iCARE My English Programme", September 2014 – February 2015.
31. Research University Grant (GUP) Vot 01K19 (RM20,000) "A Model-Based Methodology for Resilience Analysis for System Reliability Estimation", October 2014 – September 2015.
32. Research University Grant (Flagship) Vot 01G86 (RM50,000), "Web Services for The Integration of Heterogeneous Community-Centric Commuting Applications", April 2014 – March 2015.
33. Research University Grant (GUP) Vot 05H83 (RM38,000) "A New Cloud-Based Mobile Web Service Discovery Framework", April 2014 – March 2016.
34. Dana Pembangunan PengajFrearan (UTMF) Vot 4J142 (RM20,000) "An Integrated Framework for Massive Open Online Courses (MOOCs) in UTM". July 2014-June 2016.
35. Fundamental Research Grant Scheme (FRGS) Vot 4F303 (RM115,000), "An Analytical Model for Reliability Estimation Using Integrated Tasks and Resources", December 2013 - December 2015.
36. Fundamental Research Grant Scheme (FRGS) Vot 4F315 (RM73,000) "Agile Process-based Functional Requirements Change Impact Traceability Model", December 2013 - June 2015.
37. Fundamental Research Grant Scheme (FRGS) Vot 4F165 (RM56,000) "Adaptive Mobile Web Service Discovery Model", April 2013 – March 2015.
38. Research University Grant (GUP) Vot 08J20 (RM32,000) "Simplifying technologies for the disadvantage groups", December 2012 - December 2013.
39. Others Grant (KEJORA) Vot 4B059 (RM119,049), "Ke Arah Kelestarian Pembangunan Pendidikan Luar Bandar Melalui Lembaga Kemajuan Johor Tenggara (Kejora) Dan Centre for Advancement in Rural Education Informatics (iCare)", March 2012 – April 2013.
40. Research University Grant (GUP) Vot 02J78 (RM40,000), "HCI and SE Integration: analyzing the emphasis of usability in the software engineering syllabus at the academic institutions in Malaysia". April 2011-July 2012.
41. Research University Grant (GUP) Vot 00J37 (RM40,000), "Semantic Service Discovery Framework in Pervasive Computing", May 2011 – April 2012.
42. Research University Grant (GUP) Vot 3F443 (RM40,000), "HCI and SE Integration: analyzing the emphasis of usability in the software engineering syllabus at the academic institutions in Malaysia", March 2011 – March 2012
43. Research University Grant (GUP) Vot 03J23 (RM50,000), "A Modeling Approach for Integrating Variability at Requirements and Architectural Level in Software Product Line", April 2011 – March 2012
44. Key Focus area, Research and Innovation UTM, "To Study on How to Write High Impact Proposal and Development Proposals and Identify Source of Funds for Non-Engineering", May 2011 - July 2011.
45. ScienceFund Vot 79271 (RM186,200), "Design Framework of Multi Agent Software Based on Patterns", February 2008 - August 2009.

46. ScienceFund 01-01-06-SF0033 Vot 79104 (RM140,000), "Development and Evaluation of Reusable RFID Software Components", February December 2006 - October 2008.
47. ScienceFund 01-01-06-SF0033 (RM281,600), "The Development of a Tool using Bayesian Network Technique for Constructing Gene Network from Microarray Gene Expression Data", September 2007-Feb 2009.
48. IRPA VOT74040 (RM280,000), "Development of Neural Network Assisted Industrial QID Controllers Auto-Tuner", February 2002 – December 2004.
49. UPP-UTM VOT 71849 (RM18,000), "The Use of Formal Methods for Embedded Real-Time System", Jun 2002-September 2003.
50. UPP-UTM VOT 71446, "Software Engineering Methodology for Modeling Complex Real-Time System", 2000 - 2001.

6. 3. Intellectual Property

Pattern

1. A new web engineering method to develop multi-web application features in agile lifecycle, Filing number: PI 2018 001677 (Filing).
2. Component Based Analysis Patterns for Autonomous Mobile Robot (AMR) Software Development, Filing number: PI 2009 7025 (Granted).
3. An Agent Based Smart Wheelchair System Design Framework, Filing number: PI 2010 003724 (Filing).
4. A Method of Modeling Component Based Analysis and Design, Filing number: PI 2010 700051 (Granted).
5. Agent-oriented multi robot system, Universiti Teknologi Malaysia, Filing number: PI2008 4709 (Filing).

Copyright

1. Copyright LY2018006364 – Survey of Acceptance for Architecture Design Decision Making Process in Autonomous Mobile Robots.
2. Copyright LY 2018006420 – Educational Robotics Feature Model.
3. Copyright 1JLD104/27.13/1JLD120 (74) – Performability Failure Awareness Behaviour Meta-Model.
4. Copyright 1JLD104 (4) – ROBOTAR and ROBOKAR Library Support Routines.
5. Copyright 1JLD104 (20) – Modul Pengajaran Pengaturcaraan Robot dan Robokar.
6. Copyright 1JLD48 (20) – Code Generation Implementation Steps for Embedded Real-Time System Development.
7. Copyright – Component-Oriented Development Method for Embedded Real Time Software.
8. Copyright 157950 - Software Design Components for Behavior and Subsumption of Autonomous Mobile Robot Systems.
9. Copyright 157948 - Software Design Components for Input-Output and Sensor of Autonomous Mobile Robot Systems.

10. Copyright 157943 - Software Design Components for Motor Control of Autonomous Mobile Robot Systems.
11. Copyright 157953 - Pengenalan Mudah Pengaturcaraan C.
12. Programming Technique I (C++) English-Malay-Lab Module, Filing number: TPI154106.
13. Programming Technique II (C++) English-Malay-Lab Module, Filing number: TPII154113.

7. PUBLICATIONS

7.1. Book and Module

Book

1. Adila Firdaus Arbain, Dayang Norhayati Abang Jawawi, Imran Ghani, Wan Mohd Nasir Wan Kadir, "Requirements Traceability in Agile Software Development", Penerbit UTM, 2021.
2. Dayang Norhayati Abang Jawawi, Rosbi Mamat, "Teknik Membina Atur Cara dengan Bahasa C", Penerbit UTM, 2018. (Anugerah Citra Karisma UTM Penulisan Buku Asli 2019)
3. Dayang Norhayati Abang Jawawi, Radziah Mohamad, Noraniah Mohd. Yassin, Norazah Yusof, Zalmiyah Zakaria "Pengaturcaraan Berstruktur Menggunakan C++", Penerbit UTM, 2016. (Anugerah Buku Negara 2017, Kategori Pengajian Tinggi, Buku Sains dan Teknologi)
4. Vahid Khatibi. B. and Dayang Norhayati Abang Jawawi, "Software Development Effort Estimation", LAP LAMBERT Academic Publishing, ISBN 978-3-8473-1069-3, 2012.
5. Nor Bahiah Hj Ahmad, Dayang Norhayati Abang Jawawi, Norazah Yusof, Zuraini Ali Shah, Azah Kamilah Hj Muda, Shahliza Abd Halim, Ismail Mat Amin and Rozlina Mohamad, "Struktur Data & Algoritma Menggunakan C++", Penerbit UTM, 2005.
6. Safaai Deris, Paridah Samsuri, Dayang Norhayati Abang Jawawi, Mohd Yazid bin Idris and Rozlina Binti Mohamed, "Study Guide for Software Engineering – A Practitioner's Approach 5th edition by Roger S. Pressman", ACE McGraw Hill, 2003.

Teaching Modules

1. Norbahiah Ahmad, Dayang Norhayati Abang Jawawi and Zalmiyah Zakaria, "Data Structures & Algorithms", School of Computing, Faculty of Engineering, Universiti Teknologi Malaysia, 2018.
2. Radziah Mohammad, Zalmiyah Zakaria, Norazah Yusof, Noraniah Mohd Yassin and Dayang Norhayati Abang Jawawi, and "Lab Book – Programming Technique II C++", Fourth Edition, Faculty of Computer Science and Information System, Universiti Teknologi Malaysia, 2015.

3. Noraniah Mohd Yassin, Dayang Norhayati Abang Jawawi, Zalmiyah Zakaria, Radziah Mohammad and Norazah Yusof, "Lab Book – Programming Technique I C++", Sixth Edition, Faculty of Computing, Universiti Teknologi Malaysia, 2015.
4. Norbahiah Ahmad, Dayang Norhayati Abang Jawawi, and Zalmiyah Zakaria, "Data Structures & Algorithms", Third Edition, Faculty of Computing, Universiti Teknologi Malaysia, 2014.
5. Norazah Yusof, Noraniah Mohd Yassin, Dayang Norhayati Abang Jawawi, Radziah Mohammad and Paridah Samsuri, "Lab Book – Programming Technique I C++", Fifth Edition, Faculty of Computing, Universiti Teknologi Malaysia, 2013.
6. Norbahiah Ahmad, Dayang Norhayati Abang Jawawi, and Zalmiyah Zakaria, "Data Structures & Algorithms", Second Edition, Fakulti Sains Komputer dan Sistem Maklumat, Universiti Teknologi Malaysia, 2012.
7. Naomie Salim, Siti Mariyam Hj Shamsuddin, Safaai Deris, Rose Alinda Alias, Subariah Ibrahim, Roselina Sallehuddin, Siti Zaiton Mohd Hashim, Azizah A. Rahman, Dayang Norhayati Abang Jawawi, Nor Zairah Abdul Rahim, and Juhana Salim (UKM), "Handbook of Research Methods in Computing", First Edition, Faculty of Computer Science and Information System, Universiti Teknologi Malaysia, 2010.
8. Norbahiah Ahmad, Dayang Norhayati Abang Jawawi, Zalmiyah Zakaria, and Aida Ali, "Data Structures & Algorithms", First Edition, Fakulti Sains Komputer dan Sistem Maklumat, Universiti Teknologi Malaysia, 2010.
9. Masitah Ghazali and Dayang Norhayati Abang Jawawi, "Basic Programming C", First Edition, Faculty of Computer Science and Information System, Universiti Teknologi Malaysia, 2010.
10. Masitah Ghazali and Dayang Norhayati Abang Jawawi, "Lab Book – C Programming Techniques", Department of Software Engineering, 2010.
11. Norazah Yusof, Dayang Norhayati Abang Jawawi, Radziah Mohammad, Noraniah Mohd Yassin, and Zalmiyah Zakaria, "Lab Book – Programming Technique II C++", Third Edition, Faculty of Computer Science and Information System, Universiti Teknologi Malaysia, 2010.
12. Norazah Yusof, Dayang Norhayati Abang Jawawi, Noraniah Mohd Yassin, Radziah Mohammad and Paridah Samsuri, "Lab Book – Programming Technique I C++", Fourth Edition, Faculty of Computer Science and Information System, Universiti Teknologi Malaysia, 2010.
13. Norazah Yusof, Dayang Norhayati Abang Jawawi, and Radziah Mohammad, "Lab Book – Programming Technique II C++", Second Edition, Faculty of Computer Science and Information System, Universiti Teknologi Malaysia, 2009.
14. Norazah Yusof, Dayang Norhayati Abang Jawawi, Noraniah Mohd Yassin, Radziah Mohammad, Subariah Ibrahim and Hamimah Mohd Jamil, "Lab Book – Programming Technique II C++", First Edition, Faculty of Computer Science and Information System, Universiti Teknologi Malaysia, 2008.
15. Norazah Yusof, Dayang Norhayati Abang Jawawi, Noraniah Mohd Yassin, Radziah Mohammad, Paridah Samsuri and Rohayanti Hassan, "Lab Book – Programming Technique I C++", First Edition 2007, Second Edition 2008, Third

Edition 2009, Faculty of Computer Science and Information System, Universiti Teknologi Malaysia, 2009.

16. Nor Bahiah Hj Ahmad, Dayang Norhayati Abang Jawawi, Rozlina Mohamad, Norazah Yusof, Zuraini Ali Shah, Azah Kamilah Hj Muda, Shahliza Abd Halim, Ismail Mat Amin and Zarita Mohd Kosnin, "Module – Struktur Data & Algoritma Menggunakan C++ – Praktikal", Fakulti Sains Komputer dan Sistem Maklumat, Universiti Teknologi Malaysia, 2004.
17. Nor Bahiah Hj Ahmad, Rozlina Mohamad, Norazah Yusof, Zuraini Ali Shah, Dayang Norhayati Abang Jawawi, Azah Kamilah Hj Muda, Shahliza Abd Halim, Ismail Mat Amin and Zarita Mohd Kosnin, "Module Struktur Data & Algoritma Menggunakan C++", Fakulti Sains Komputer dan Sistem Maklumat, Universiti Teknologi Malaysia, 2002.

Books / Proceeding Editor

1. Bajwa, I.S., Sibalija, T., Jawawi, D.N.A., Communications in Computer and Information Science 1198, ISSN:1865-0929, 2020. (Editor)
2. Bajwa, I.S., Sibalija, T., Jawawi, D.N.A., Intelligent Technologies and Applications, ISBN: 978-981-15-5232-8, 2019. (Editor)
3. Imran Ghani, Dayang Norhayati Abang Jawawi, Siva Dorairaj and Ahmed Sidky, Emerging Innovations in Agile Software Development, IGI Global, ISBN: 781466698581, 2016. (Editor)
4. Dayang Norhayati Abang Jawawi, Shahida Sulaiman, Kamal Zuhairi Zamli, Jamaiah H. Yahaya, Radziah Mohamad, Jurnal Teknologi, Vol 77, No 9, eISSN 2180–3722, 2015. (Chief Editor)
5. Dayang Norhayati Abang Jawawi, Shahida Sulaiman, Radziah Mohamad, and Nor Azizah Sa'adon, "Malaysian Software Engineering Conference (MySEC 2014)", 978-1-4799-5439-1, 2014. (Editor)
6. Dayang Norhayati Abang Jawawi and Mohd Nazir bin Ahmad Sharif "The Proceedings of The Software Engineering Postgraduates Workshop (SEPoW2011)", 978-967-0194-15-8, 2011. (Editor)
7. Dayang Norhayati Abang Jawawi, Siti Zaiton Mohd Hashim, Radziah Mohamad, Zailani Abdullah, Sumazly Sulaiman, Mohd Zulkifli Mohd Zaki and Helwana Mohamad, "The Proceedings of the First APSEC2009 Workshop and Tutorial and Software Engineering Postgraduates Workshop (SEPoW2009)", ISBN 978-967-5366-15-4, 2009. (Editor).

7.2. Articles in Book Chapter

1. Sher, F., Jawawi, D.N.A., Mohammad, R., Babar M. I., Kazmi, R., Shah, M.A. "Multi-aspects intelligent requirements prioritization technique for value based software systems", Communications in Computer and Information Science, Volume 1198, pp. 357-371. 2020.

2. Almutlaq, A.J.H., Jawawi, D.N.A. "Missing data imputation techniques for software effort estimation: A study of recent issues and challenges", *Advances in Intelligent Systems and Computing*, 1073, pp. 1144-1158. 2020.
3. Wakil, K., Jawawi, D.N.A., Laaz, N. "Role of Interaction Flow Modeling Language (IFML) in the Development of Ubiquitous Web Applications (UWAs)", *Advances in Intelligent Systems and Computing*, 1105 AISC, pp. 390-401. 2020.
4. Sulaiman, R.A., Jawawi, D.N.A., Halim, S.A. "Derivation of test cases for model-based testing of software product line with hybrid heuristic approach", *Advances in Intelligent Systems and Computing*, 1073, pp. 199-208. 2020.
5. Jaafar, A.A., Sharif, K.H., Ghareb, Jawawi, D.N.A., "Internet of Thing and smart city: State of the art and future trends", *Advances in Intelligent Systems and Computing*, Volume 760, 2019, Pages 3-28.
6. Habibah Ismail, Dayang N. A. Jawawi, "A Hybrid Multiprocessor Scheduling Approach for Weakly Hard Real-Time Tasks", *Communications in Computer and Information Science*, 752, pp. 666-678. 2017. (Conference proceeding).
7. Dayang N. A. Jawawi, Shahliza Abd Halim, Siti Norani, Mohamad Ekssan, Rosbi Mamat, Mohd Adham Isa, "Educational Robotics Course Content Reusability with Feature Model", the 4rd Innovative Practices in Higher Education Expo 2017 (I-PHEX 2016), CEE Book Series, ISBN: 978-967-2171-07-2, pp. 24-28.
8. Rosbi Mamat, Dayang N. A. Jawawi, Afnizanfaizal Abdullah, Mohd Adham Isa2 & Hazza Nuzly Abdull Hamed, "An Engagement Model for Co-curricular Service Learning in Promoting Social and Emotional Skills", the 3rd Innovative Practices in Higher Education Expo 2016 (I-PHEX 2016), CEE Book Series, ISBN: 978-967-0194-64-6, pp. 37-40.
9. Noor Azean Atan, Norhidayah Abdul Hassan, Che Ros Ismail, Dayang Norhayati Abang Jawawi, Noor Dayana Abd Halim, "UTM MOOC", *A Guide to New Academia Learning Innovation, UTMLed*, 2016, ISBN 978-967-0194-71-4, pp. 104-111.
10. Imran Ghani, Dayang Norhayati Abang Jawawi, Naghmeh Niknejad, Murad Khan, Seung Ryul Jeong, "A Survey of Agile Transition Models", *Emerging Innovations in Agile Software Development*, IGI Global, 2016, ISBN: 781466698581, pp: 141-164.
11. Dayang Norhayati Abang Jawawi, Rosbi Mamat, Mohd Zulkifli bin Mohd Zaki, Radziah binti Mohamad, "Memupuk Kreativiti dan Inovasi melalui RoboKar: Kajian Kes iCare", *Tanggungjawab Sosial Universiti: Model Perkongsian Ilmu Melalui Projek Komuniti UTM-KEJORA*, Faculty Komputeran, 2015, ISBN: 978-983-42004-3-5, pp: 43-72.
12. Muhammad Imran Babar, Masitah Ghazali, Dayang N.A. Jawawi, "A Bi-Metric and Fuzzy C-Means Based Intelligent Stakeholder Quantification System For Value-Based Software", *New Trends In Software Methodologies, Tools And Techniques Proceedings Of The 13th SOMET 2014*, ISBN: 9781614994343 p.p: 295-309
13. Abdelzahir Abdelmaboud, Dayang N.A. Jawawi, Imran Ghani, and Abubakar Elsafi, "A Comparative Evaluation of State-Of-The-Art Cloud Migration

- Optimization Approaches”, Recent Advances on Soft Computing and Data Mining Advances in Intelligent Systems and Computing, Springer International Publishing Switzerland 2014, Vol.287, ISBN: 978-3-319-07692-8
14. Mohd Adham Isa and Dayang Norhayati Abang Jawawi, “A Methodology for Model-Based Reliability Estimation”, Handbook of Research on Emerging Advancements and Technologies in Software Engineering, p.p”450-472, ISBN: 9781466660267. IGI Global, 2014.
 15. Muhammad Waqar Aziz, Radziah Mohamad, Dayang N. A. Jawawi, “Ontology-based Service Description, Discovery and Matching in Distributed Embedded Real-Time Systems”, Ontology-Based Applications for Enterprise Systems and Knowledge Management, Muhammad Nazir Ahmad (Ed.), ISBN: 9781466619937, IGI Global, August 2012.
 16. Shahliza Abd Halim, Dayang N. A. Jawawi, Noraini Ibrahim and Safaai Deris, “An Approach for Representing Domain Requirements and Domain Architecture in Software Product Line”, Software Product Line – Advanced Topic, 2012, Intech Open Access Publisher, ISBN 978-953-51-0436-0, pp. 23-42.
 17. Dayang N. A. Jawawi, Suzila Sabil, Rosbi Mamat, Mohd Zulkifli Mohd Zaki, Mahmood Aghajani Siroos Talab, Radziah Mohamad, Norazian M. Hamdan & Khadijah Kamal, “A Robotic Wheelchair Component-Based Software Development”, Book Chapter for Mobile Robots / Book 2, 2011, Intech Open Access Publisher. ISBN 978-953-307-842-7, pp. 102-126. DOI: 10.5772/25644.
 18. M. A. Isa and Dayang N. A. Jawawi, (2011) “Comparative Evaluation of Performance Assessment and Modeling Method for Software Architecture”, Communications in Computer and Information Science, 1, Volume 181, Software Engineering and Computer Systems, Part 1, Pages 764-766. ISBN 978-3-642-22203-0 (*published in Series of Springer – ISI and SCOPUS Indexing*).
 19. Mohd Z.M. Zaki, M.A. Isa and Dayang N.A. Jawawi. (2011). “Meta-model Validation of Integrated MARTE and Component-Based Methodology Component Model for Embedded Real-Time Software”. Communications in Computer and Information Science, Vol. 181, Software Engineering and Computer Systems. Part 1, pp. 246-256. ISBN 978-3-642-22203-0 (*published in Series of Springer – ISI and SCOPUS Indexing*). DOI: 10.1007/978-3-642-22203-0_21.
 20. Suzila Sabil, Dayang Norhayati Abang Jawawi, “Component-Oriented Development Method for Embedded Real Time Software”, Book Chapter for Advances in Software Engineering: Research and Practice (Chapter 4), 2008, UTM Publisher, pp. 79-112.
 21. Shahliza Abd Halim, Dayang Norhayati Abang Jawawi, Safai Deris, “Setting the Context for Variability Integration in Software Product Line”, Book Chapter for Advances in Software Engineering: Research and Practice (Chapter 2), 2008, UTM Publisher, pp. 23-52.

7.3. Journals

ISI Indexed

1. Zhou, J., Hai, T., Jawawi, DNA, Wang, D., Ibeke, E. and Biamba, C. (2022). "Voice spoofing countermeasure for voice replay attacks using deep learning", *Journal of Cloud Computing*. Volume:11 (1), 51. (Q2) (ISI & Scopus Indexed).
2. Mehmood, A., Jawawi, DNA. (2022). "AJFCode: An Approach for Full Aspect-Oriented Code Generation from Reusable Aspect Models", *KSII Transactions on Internet and Information Systems*. Volume:16 (5), pp. 1973-1993. (Q3) (ISI & Scopus Indexed).
3. Sulaiman, R. A., Jawawi, DNA, Halim, S. A. (2022). "Classification Trends Taxonomy of Model-based Testing for Software Product Line: A Systematic Literature Review", *KSII Transactions on Internet and Information Systems*. Volume:16 (5), pp. 1561-1583. (Q3) (ISI & Scopus Indexed).
4. Narawi, A., Jawawi, DNA, Samsudin, R. (2022). "Rainfall Forecasting Using the Group Method of Data Handling Model: A Case Study of Sarawak, Malaysia", *Lecture Notes on Data Engineering and Communications Technologies*. Volume:127, pp. 129-140. (ISI & Scopus Indexed).
5. Jawawi, DNA, Jamal, NN, Halim, SA, Sa'adon, NA, Mamat, R, Isa, MA, Mohamad, R, Hamed, HNA (2022). "Nurturing Secondary School Student Computational Thinking Through Educational Robotics", *International Journal of Emerging Technologies in Learning*. Volume:17 (3), pp. 117-128. (Q2) (ISI & Scopus Indexed).
6. Altaie, MA and Jawawi, DNA, (2021). "Adaptive gamification framework to promote computational thinking in 8-13 year olds", *Journal of E-Learning and Knowledge Society*. Volume:17 (3), pp. 89-100. (Q3) (ISI & Scopus Indexed).
7. AlMutlaq, AJ, Jawawi, DNA and Arbain, AFB (2021). "Fuzzy C-mean Missing Data Imputation for Analogy-based Effort Estimation", *International Journal of Advanced Computer Science and Applications*. Volume:12 (8), pp. 628-640. (Q3) (ISI & Scopus Indexed).
8. Jamal, NN, Jawawi, DNA, Hassan, R, Mamat, R (2021). "Conceptual Model of Learning Computational Thinking Through Educational Robotic", *International Journal of Emerging Technologies in Learning*. Volume:16 (15), pp. 91-106. (Q2) (ISI & Scopus Indexed).
9. R. Aduni Sulaiman, Dayang N. A. Jawawi and Shahliza Abdul Halim (2021). "A Dissimilarity with Dice-Jaro-Winkler Test Case Prioritization Approach for Model-Based Testing in Software Product Line", *KSII Transactions on Internet and Information Systems*. Volume:15 (3), pp. 932-951. (Q4 IF 0.858) (ISI & Scopus Indexed).
10. Khatibsyarbini, M, Isa, MA, Jawawi, DNA, Shafie, MLM, Wan-Kadir, WMN, Hamed, HNA, Suffian, MDM (2021). "Trend Application of Machine Learning in Test Case Prioritization: A Review on Techniques", *IEEE Access*. Volume:9, pp. 166262-166282. (Q2 IF 3.367) (ISI & Scopus Indexed).
11. Ashari, Afifah M., Abd Halim, Shahliza, Jawawi, Dayang N. A., Suvelayutnan, Ushananthiny and Isa, Mohd Adham (2021). "Quality Driven Approach for

- Product Line Architecture Customization in Patient Navigation Program Software Product Line”, *KSII Transactions on Internet and Information Systems*. Volume:15 (3), pp. 2455-2475. (Q4 IF 0.858) (ISI & Scopus Indexed).
12. Muhammad Younas, Dayang Norhayati Abang Jawawi, Muhammad Arif Shah, Ahmad Mustafa, Muhammad Awais, Muhammad Kamran Ishfaq and Karzan Wakil (2020). “Elicitation of Nonfunctional Requirements in Agile Development Using Cloud Computing Environment”, *IEEE Access*. Volume:8, pp. 209153 - 209162. (Q1 IF 4.098) (ISI & Scopus Indexed).
 13. Younas, M., Jawawi, D. N., Mahmood, A. K., Ahmad, M. N., Sarwar, M. U., & Idris, M. Y. (2020). “Agile Software Development using Cloud Computing: A Case Study”, *IEEE Access*. Volume:8, pp. 4475-4484. (Q1 IF 4.098) (ISI & Scopus Indexed).
 14. Younas, Muhammad, A. Jawawi, D. N., Ghani, Imran, Arif Shah, Muhammad; “Extraction of non-functional requirement using semantic similarity distance”, *Neural Computing and Applications*, pp. 7383- 7397, Volume: 32 , Issue: 11 , June 2020. (Q1 IF 4.627) (ISI & Scopus Indexed)
 15. Shah, M.A., Jawawi, D.N.A., Isa, M.A., Abdelmaboud, A., Sholichin, F. (2020). “Ensembling Artificial Bee Colony with Analogy-Based Estimation to Improve Software Development Effort Prediction”, *IEEE Access*. (Q1 IF 4.098) (ISI & Scopus Indexed).
 16. Nsaif Al-Sammarraie, H.N., Jawawi, D.N.A. (2020). “Multiple Black Hole Inspired Meta-Heuristic Searching Optimization for Combinatorial Testing”, *IEEE Access*. 8,8998290, pp. 33406-33418 (Q1 IF 4.098) (ISI & Scopus Indexed).
 17. Muhammad Younas, Dayang N. A. Jawawi, Ghani, I., MA Shah, Khurshid, MM, Madni, SHH, “Framework for Agile Development using Cloud Computing: A Survey”, *Arabian Journal for Science and Engineering*, Volume: 44 Issue: 11 (Q3 IF 1.518) pp 8989-9005, Nov 2019. (ISI & Scopus Indexed)
 18. Muhammad Younas, Wakil, K, Dayang N. A. Jawawi, MA Shah, Mustafa, A, “An Automated Approach for Identification of Non-Functional Requirements using Word2Vec Model”, *International Journal Of Advanced Computer Science and Applications* Volume: 10 Issue: 8 pp: 539-547 Published: Aud 2019. (ISI & Scopus Indexed)
 19. Karzan Wakil and Dayang N.A. Jawawi, “Extracting the Features of Modern Web Applications based on Web Engineering Methods”, *International Journal of Advanced Computer Science and Applications* Volume: 10 Issue: 2 pp: 63-71. Published: 2019. (ISI and Scopus Indexed).
 20. Khatibsyarbini, Muhammad; Isa, Mohd Adham; Jawawi, Dayang N. A. Jawawi, HNA Hamed, MDM Suffian, “Test Case Prioritization Using Firefly Algorithm for Software Testing”, *IEEE Access*, Volume: 7 (Q1 IF4.098) pp: 132360-132373, Published: 2019. (ISI and Scopus indexed)
 21. Shah, Muhammad Arif; Jawawi, Dayang N. A.; Isa, Mohd Adham; Wakil, Karzan); Younas, Muhammad; Mustafa, Ahmed, “MINN: A Missing Data Imputation Technique for Analogy-based Effort Estimation”, *International Journal of Advanced Computer Science and Applications*, Vol. 10, No. 2, 222-231. Published: Feb 2019. (ISI and Scopus indexed).

22. S. Abd Halim, Shahliza; Jawawi, Dayang Norhayati Abang; Sahak, Muhammad, "Similarity Distance Measure and Prioritization Algorithm for Test Case Prioritization in Software Product Line Testing", *Journal of Information and Communication Technology-Malaysia*, Vol. 10, No. 2, 222-231. Published: Feb 2019. (ISI and Scopus indexed).
23. Wakil, Karzan; Jawawi, Dayang N. A.; Rachmat, Haris, "Enhancing Interaction Flow Modeling Language Metamodels for Designing Features of Rich Internet Applications", *International Journal of Integrated Engineering*, Volume: 10 Issue: 6 Special Issue: 2018 pp: 97-105. (ISI and Scopus indexed).
24. Siti, N. M; Halim, Shahliza Abd; Jawawi, Dayang N. A; Mamat, Rosbi, "Enhanced Educational Robotics Feature Model in Software Product Line". *Advanced Science Letters*, Volume 24, Number 10, October 2018, pp. 7251-7256(6). (ISI indexed)
25. Khatibsyarbini, Muhammad; Isa, Mohd Adham; Jawawi, Dayang Norhayati Abang, "Particle Swarm Optimization for Test Case Prioritization Using String Distance", *Advanced Science Letters*, Volume 24, Number 10, October 2018, pp. 7221-7226(6). (ISI indexed)
26. Muhammad Younas, Dayang N. A. Jawawi, Imran Ghani, Terrence Fries, Rafaqut Kazmi, "Agile development in the cloud computing environment: A systematic review", *Information and Software Technology*, 93, November 2018, (Q1 IF2.627) pp. 74-93. 2018. (ISI & Scopus Indexed)
27. Khatibsyarbini, M., Isa, M.A., Jawawi, D.N.A., Tumeng, R., "Test case prioritization approaches in regression testing: A systematic literature review", *Information and Software Technology*, 93, (Q1 IF2.627) pp. 74-93. 2018. (ISI & Scopus Indexed)
28. Karzan Wakil and Dayang N.A. Jawawi, "Analyzing Interaction Flow Modeling Language in Web Development Lifecycle", *International Journal of Advanced Computer Science and Applications*, Vol. 8, No. 1, 286-293. (ISI). Published: 2017.
29. R Kazmi, DNA Jawawi, R Mohamad, I Ghani, "Effective Regression Test Case Selection: A Systematic Literature Review", *ACM Computing Surveys (CSUR)* (IF5.243) 50 (2), 29. (ISI & Scopus Indexed). Published: 2017.
30. Muhammad Younas, Imran Ghani, Dayang N. A. Jawawi, Muhammad Murad Khan, "A Framework for Agile Development in Cloud Computing Environment", *Journal of Internet Computing and Services*, Volume: 17 Issue: 5 Pages: 67-74 Published: 2016. (ISI Indexed)
31. Mojtaba Raeisi Nejad Dobuneh and Dayang N.A. Jawawi, "An Intelligent Framework for Test Case Prioritization Using Evolutionary Algorithm", *Journal of Internet Computing and Services*, Volume: 17 Issue: 5 Pages: 89-95 Published: 2016. (ISI Indexed)
32. Awad Ali, Dayang N. A. Jawawi, Mohd Adham Isa, Muhammad Imran Babar, "Technique for Early Reliability Prediction of Software Components Using Behaviour Models", *PLOS One*, September 26, 2016, Article number e0163346. (IF.3.234). ISSN: 1932-6203. (ISI & Scopus Indexed)
33. Hosein Abedinpourshotorban, Siti Mariyam Shamsuddin, Zahra Beheshti, Dayang NA Jawawi, "Electromagnetic field optimization: A physics-inspired

- metaheuristic optimization algorithm”, *Swarm and Evolutionary Computation*, Volume 26, February 2016, Pages 8–22, (IF.2.96). (ISI & Scopus Indexed)
34. Muhammad Imran Babar, Masitah Ghazali, Dayang N.A. Jawawi, Siti Maryam Shamsuddin, and Noraini Ibrahim, “PHandler: An expert system for a scalable software requirements prioritization process”, *Knowledge-Based Systems*, Vol.84, pp.179-202, 1st August 2015. (IF.2.947). ISSN:0950-7051. DOI: 10.1016/j.knosys.2015.04.010. (ISI & Scopus Indexed).
 35. Muhammad Imran Babar, Masitah Ghazali, Dayang N.A. Jawawi, and Kashif Bin Zaheer, “StakeMeter: Value-Based Stakeholder Identification and Quantification Framework for Value-Based Software Systems”, *PLOS One*, Vol.10, Issue No. 3, 23 March 2015, Article number e0121344. (IF.3.234). ISSN:1932-6203. (ISI & Scopus Indexed).
 36. Abdelzahir Abdelmaboud, Dayang N. A. Jawawi, Imran Ghani, Abubakar Elsafi, Barbara Kitchenham, “Quality of service approaches in cloud computing: A systematic mapping study”, *Journal of Systems and Software*, Vol.101, 1 March 2015, pp.159-179. (IF.1.352). ISSN:0164-1212. (ISI & Scopus Indexed).
 37. Karzan Wakil and Dayang N.A. Jawawi, “Model Driven Web Engineering: A Systematic Mapping Study”, *e-Informatica Software Engineering Journal*, Vol.9, Issue No.1, pp.107–142, 2015. ISBN: 978-83-7493-305-6. DOI: 10.5277/E-INF150106. (Scopus & ISI Indexed)
 38. Vahid Khatibi Bardsiri, Dayang Norhayati Abang Jawawi, and Elham Khatibi, “Towards Improvement of Analogy-Based Software Development Effort Estimation: A Review”, *International Journal of Software Engineering and Knowledge Engineering*, Vol.24, Issue No.7, pp. 1065–1089, September 2014. (IF.0.362). ISSN: 0218-1940.
 39. Muhammad Imran Babar, Masitah Ghazali, Dayang N.A. Jawawi, Abubakar Elsafi, “Stakeholder Management in Value-Based Software Development: Systematic Review”, *IET Software*, doi: 10.1049/iet-sen.2013.0216, pp.1-13, October 2014. (IF.0.536). ISSN:17518806
 40. Vahid Khatibi Bardsiri, Dayang Norhayati Abang Jawawi, Siti Zaiton Mohd Hashim and Elham Khatibi, “A Flexible Method to Estimate the Software Development Effort Based on The Classification of Projects and Localization of Comparisons”, *Empirical Software Engineering*, Vol.19, Issue No.4, pp.857-884, August 2014. (IF.1.64).
 41. Isa, M. A., Jawawi, D. N. and Zaki, M. Z., “Model-Driven Estimation Approach for System Reliability Using Integrated Tasks and Resources,” *Software Quality Journal*, 2014. DOI: 10.1007/s11219-013-9209-z (*Springer Publication, ISI indexed, IF:0.41*).
 42. Vahid Khatibi.B, Dayang Norhayati Abang Jawawi, Amid Khatibi, and Elham Khatibi, “LMES: A Localized Multi-Estimator Model to Estimate Software Development Effort”, *Engineering Applications of Artificial Intelligence*, Vol.26, Issue No.10, pp.2624–2640, November 2013, <http://dx.doi.org/10.1016/j.engappai.2013.08.005>. ISSN:0952-1976. (ISI and Scopus indexed: IF 1.625).

43. Radziah Mohamad, Muhammad Waqar Aziz, Dayang N. A. Jawawi, Rosbi Mamat, "Service Based Meta-Model for the development of Distributed Embedded Real-time Systems, *Real-Time Systems*", Vol.49, Issue No.5, pp.563-579, September 2013, DOI: 10.1007/s11241-013-9179-z. *Springer Science*. (IF: 0.55). ISSN:0922-6443
44. Khatibi.B, Vahid, Dayang N. A. Jawawi, Siti Zaiton Mohd Hashim and Elham Khatibi (2012). "A PSO-Based Model to Increase the Accuracy of Software Development Effort Estimation". *Software Quality Journal*, Vol.21, Issue No.3, pp.501-526, September 2013, DOI 10.1007/s11219-012-9183-x (Springer, ISI and Scopus indexed: IF 0.854). ISSN:0963-9314
45. Abid Mehmood and Dayang N. A. Jawawi, "Aspect-Oriented Model-Driven Code Generation: A systematic mapping study", *Information and Software Technology*, Vol.55, Issue No.2, February 2013, pp. 395-411, <http://dx.doi.org/10.1016/j.infsof.2012.09.003>. (ISI and Scopus indexed: IF 1.522).
46. Khatibi.B, Vahid, Dayang N. A. Jawawi, Siti Zaiton Mohd Hashim and Elham Khatibi (2012). "Increasing the Accuracy of Software Development Effort Estimation Using Projects Clustering". *IET software*, Volume 6, 2012 Issue 6, p. 461-573. (ISI and Scopus indexed: IF 0.329).
47. Radziah Mohamad, Muhammad Waqar Aziz, Dayang N. A. Jawawi, M. Ghazali M.Z. Arbaie N. Ibrahim, "Service Identification Guideline for Developing Distributed Embedded Real-Time Systems", *IET Software*, 6(1):74-82, ISSN: 1751-8806/2011, 2012 (ISI, SCOPUS, IF: 0.33).
48. Vahid Khatibi.B, Dayang Norhayati Abang Jawawi, Siti Zaiton Mohd Hashim and Elham Khatibi, "A hybrid method for increasing the accuracy of software development effort estimation, *Scientific Research and Essays*", 6(30), ISSN: 1992-2248, October 2011, (ISI indexed, Impact Factor:0.44).

Scopus Indexed

1. Ismail, H., Jawawi, D.N.A., Ahmedy, I. "A Hybrid Real-Time Scheduling Mechanism Based on Multiprocessor for Real-Time Tasks in Weakly Hard Specification", *Lecture Notes in Networks and Systems*, 2022, 506, pp. 228-247.
2. Jawawi, D.N.A., Tumeng, R., Irsyad Kamil, M.R., ...Zahilah, R., Mohamad, M.N.H. "Requirements-Based Testing for Robotic Wheelchair Tracking Software System", *Malaysian Journal of Medicine and Health Sciences*, 2021, 17, pp. 47-53.
3. Arbain, S.H., Mustaffa, N.H., Ali, N.A., Jawawi, D.N.A. "Parameter Design for Group Method Data Handling (GMDH) using Taguchi in Software Effort Estimation", *Journal of Physics: Conference Series*, 2021, 2129(1).
4. Basmmi, A.B.M.N., Halim, S.A., Jawawi, D.N.A. "Evaluating the Reusability of Core Assets for Service Oriented Product Line: Case Study of Patient Navigation Program (PNP)", *Malaysian Journal of Medicine and Health Sciences*, 2021, 17, pp. 28-33.
5. Shah, M.A., Jawawi, D.N.A., Isa, M.A., Younas, M., Mustafa, A. "Adopting the Appropriate Performance Measures for Soft Computingbased Estimation by

- Analogy", *International Journal on Advanced Science, Engineering and Information Technology*, 2020, 10(2), pp. 629–634
6. Arbain, A.F., Jawawi, D.N.A., Kadir, W.M.N.B.W., Ghani, I. "Case study on non-functional requirement change impact traceability for Agile software development", *International Journal on Advanced Science, Engineering and Information Technology*, (1), pp. 34-40. 2020.
 7. Arbain, A.F.B., Jawawi, D.N.A., Wan Kadir, W.M.N.B., Ghani, I; "Requirement traceability model for agile development: Results from empirical studies", *International Journal of Innovative Technology and Exploring Engineering*, 8(Special issue), pp. 402-405, 2019.
 8. Mohamad, N., 2019 Ahmad, N.B., Jawawi, D.N.A.; "Online interaction model for MOOC design.", *International Journal of Recent Technology and Engineering*, 8(2S), pp. 57-64, 2019.
 9. Sher, F., Jawawi, D.N.A., Mohammad, R., "Requirements prioritization aspects quantification for value-based software developments", *Journal of Theoretical and Applied Information Technology* 97(14), pp. 3969-3979, 2019.
 10. Younas, Muhammad, Wakil, Karzan, A. Jawawi, Dayang N., Arif Shah, Muhammad, Mustafa, Ahmad; "An automated approach for identification of non-functional requirements using Word2Vec model" *International Journal of Advanced Computer Science and Applications*, 10(8), 760, pp. 539-547, 2019.
 11. Jaafar, Ako A., Sharif, Karzan H., Ghareb, Mazen I., A. Jawawi, Dayang N.; "Internet of Thing and smart city: State of the art and future trends" *Advances in Intelligent Systems and Computing* pp. 3-28, 2019.
 12. Khalifa, Eglal M., Jawawi, DNA, Jamil, Haitham Ahmed; "An efficient method to generate test cases from UML-USE CASE DIAGRAM", *International Journal of Engineering Research and Technology*, 12(7), pp. 1138-1145, 2019.
 13. Younas, Muhammad, A. Jawawi, Dayang N., Ghani, Imran, Shah, Muhammad Arif, "Framework for Agile Development Using Cloud Computing: A Survey" *Arabian Journal for Science and Engineering*, 44(11), pp. 8989-9005, 2019.
 14. Jawawi, D.N.A., Ibrahim, Noraini, Halim, Shahliza A., Mamat, Rosbi, Mohamed, Norhidawani and Tumeng, R. "Adaptation of Project-Oriented Problem-Based Framework for Teaching Computer Programming" *Proceedings - 2017 7th World Engineering Education Forum, WEEF 2017*, 8467073, pp. 844 – 849, 2018
 15. Suffian, M.D.M., Jawawi, D.N.A., Saedudin, R.R., Isa, M.A. "Towards formulating dynamic model for predicting defects in system testing using metrics in prior phases", *International Journal of Integrated Engineering*, 10(6), pp. 66-74, 2018.
 16. Laaz, N., Wakil, K., Mbarki, S., Jawawi, D.N., "Comparative analysis of interaction flow modeling language tools", *Journal of Computer Science* 14(9), pp. 1267-1278, 2018.
 17. Sulaiman, R.A., Jawawi, D.A., Halim, S.A., "Coverage-based approach for model-based testing in Software Product Line", *International Journal of Engineering and Technology (UAE)* 7(4), pp. 63-68, 2018.

18. Mohamad, N., Ahmad, N.B., Jawawi, D.N.A. "Malaysia MOOC: Improving low student retention with predictive analytics", *International Journal of Engineering and Technology (UAE)* 7(2), pp. 145-152, 2018.
19. Wakil, K., Jawawi, D.N.A. "A new framework for usability evaluation web engineering methods", *Journal of Theoretical and Applied Information Technology* 96(2), pp. 354-364, 2018.
20. Wakil, K., Jawawi, D.N.A., Rachmat, H. "Enhancing interaction flow modeling language metamodels for designing features of rich internet applications", *International Journal of Integrated Engineering*, 10(6), pp. 97-105, 2018.
21. Razak, S.A., Isa, M.A., Jawawi, D.N.A. "Enhancing similarity distances using mandatory and optional forearly fault detection", *Indonesian Journal of Electrical Engineering and Computer Science*, Volume 11, Issue 3, September 2018, Pages 1194-1203, 2018.
22. Adila Firdaus Arbain, Dayang Norhayati Abang Jawawi, Imran Ghani, Wan M. N. Wan Kadir "Non-Functional Requirement Traceability Process Model for Agile Software Development", *Journal of Telecommunication Electronic and Computer Engineering*, Vol 9, No 3-5, pp. 203-211, 2017.
23. Muhammad Sahak, Dayang N. A. Jawawi, Shahliza A. Halim, "An Experiment of Different Similarity Measures on Test Case Prioritization for Software Product Lines", *Journal of Telecommunication Electronic and Computer Engineering*, Vol 9, No 3-4, pp. 177-185, 2017.
24. Rifaqat Kazmi, Dayang N. A. Jawawi, Radziah Mohamad, Imran Ghani, Muhammad Younas, "A Test Case Selection Framework and Technique: Weighted Average Scoring Method", *Journal of Telecommunication Electronic and Computer Engineering*, Vol 9, No 3-4, pp. 15-22, 2017.
25. Safwan Abd Razak, Mohd Adham Isa, Dayang Norhayati Abang Jawawi, "On Implementing Usability Evaluation Activities within Agile Environment: A Plan Based-Process", *Journal of Telecommunication Electronic and Computer Engineering*, Vol 9, No 3-3, pp. 89-94, 2017.
26. Muhammad Sahak, Dayang N. A. Jawawi, Shahliza A. Halim, Isa M.A., "Evaluation of software product line test case prioritization technique", *International Journal on Advanced Science, Engineering and Information Technology*, 7(4-2 Special Issue), pp. 1601-1608, 2017.
27. Khatibsyarbini, M., Isa, M.A., Jawawi, D.N.A., "A hybrid weight-based and string distances using particle swarm optimization for prioritizing test cases", *Journal of Theoretical and Applied Information Technology* 95(12), pp. 2723-2732, 2017.
28. LF Ong, MA Isa, DNA Jawawi, SA Halim, "Improving Software Reliability Growth Model Selection Ranking Using Particle Swarm Optimization", *Journal of Theoretical and Applied Information Technology*, 95(1), pp. 155-165, 2017.
29. Amirhossein Safi, Karzan Wakil, Dayang Jawawi, "Redundancy Removal in QoS-Driven Web Services Composition", *International Review on Computers and Software (I.RE.CO.S.)*, Vol. 11, N. 1, January 2016, ISSN 1828-6003. (Scopus Indexed)

30. Muhammad Imran Babar, Masitah Ghazali and Dayang N.A. Jawawi, "Risk Based Decision Support System for Stakeholder Quantification for Value Based Software Systems", *Journal of Theoretical and Applied Information Technology (JATIT)*, Vol.76, No.3, 30th June 2015, pp.373-385. ISSN: 1817-3195. (Scopus Indexed)
31. Shahliza A. Halim, Dayang N. A. Jawawi, Noraini Ibrahim, M. Zulkifli M. Zaki, Safaai Deris, "Multi Attribute Architecture Design Decision for Core Asset Derivation", *Jurnal Teknologi (Sciences & Engineering)*, Vol.77, No.9, November 2015, pp.75-87. ISSN: 0127-9696. (Scopus Indexed)
32. Adila Firdaus, Imran Ghani, Dayang Norhayati Abg Jawawi, Wan Mohd Nasir Wan Kadir, "Non-Functional Requirements (NFRS) Traceability Metamodel For Agile Development", *Jurnal Teknologi (Sciences & Engineering)*, Vol.77, No.9, November 2015, pp.179-190. ISSN: 0127-9696. (Scopus Indexed)
33. Habibah Ismail and Dayang N. A. Jawawi, "A Weakly Hard Scheduling Approach of Partitioned Scheduling on Multiprocessor Systems", *Jurnal Teknologi (Sciences & Engineering)*, Vol.77, No.9, November 2015, pp.179-190. ISSN: 0127-9696. (Scopus Indexed)
34. Awad Ali, Dayang N. A. Jawawi, Mohd Adham Isa, "Strategy for Scalable Scenarios Modeling and Calculation in Early Software Reliability Engineering", *Jurnal Teknologi (Sciences & Engineering)*, Vol.77, No.9, November 2015, pp.139-148. ISSN: 0127-9696. (Scopus Indexed)
35. Mojtaba Raeisi Nejad Dobuneh, Dayang N. A. Jawawi, Mojtaba Vahidi Asl, and Mohammad V. Malakooti, "Clustering Test Cases in Web Application Regression Testing using Self-Organizing Maps", *International Journal Advance Soft Compu. Appl (IJASCA)*, Vol. 7, No. 2, July 2015, pp.1-14. ISSN: 2074-8523. (Scopus Indexed)
36. Abdelzahir Abdelmaboud, Dayang N. A. Jawawi, Imran Ghani and Abubakar Elsafi, "A Comparative Evaluation of Cloud Migration Optimization Approaches: A Systematic Literature Review", *Journal of Theoretical and Applied Information Technology (JATIT)*, Vol.79, No.3, 30th September 2015, pp.395-414. ISSN: 1992-8645. (Scopus Indexed)
37. Awad Ali, Dayang N. A. Jawawi, Mohd Adham Isa, "Scalable Scenario Specifications to Synthesize Component-Centric Behaviour Models", *International Journal of Software Engineering and Its Applications (IJSEIA)*, Vol.9, No.9, 2015, pp.79-106. ISSN: 1738-9984. (Scopus Indexed)
38. Mohd Z. M. Zaki, Dayang N. A. Jawawi and Mohd Adham Isa, "Integrated MARTE-based model for designing component-based embedded real-time software", *International Journal of Software Engineering and Its Applications (IJSEIA)*, Vol.9, No.3, 2015, pp.157-174. ISSN: 1738-9984. (Scopus Indexed)
39. Abubakar Elsafi, Dayang N. A. Jawawi, Abdelzahir Abdelmaboud, and Awad Ali, "A comparative evaluation of state-of-the-art integration testing techniques of component-based software", *Journal of Theoretical and Applied Information Technology (JATIT)*, Vol.71, No.2, 20 January 2015, pp.257-267. ISSN: 1992-8645 (Scopus indexed). (Scopus Indexed)
40. Mohd Adham Isa and Dayang Norhayati Abang Jawawi, "A Reliability Estimation Model Using Integrated Tasks and Resources", *Journal of Theoretical and Applied*

- Information Technology (JATIT), Vol. 74, No.2, 2015, pp. 171-182. ISSN: 1992-8645. (Scopus Indexed)
41. Karzan Wakil, Amirhossein Safi and Dayang N.A. Jawawi "Enhancement of UWE Navigation Model: Homepage Development CaseStudy", *International Journal of Software Engineering and Its Applications (IJSEIA)-Australia*, Vol.8, No.4, pp.197-212, 2014. (Scopus indexed).
 42. Habibah Ismail and Dayang N. A. Jawawi., "A Weakly Hard Real-Time Scheduling Analysis Framework Using Genetic Algorithm", *Int. J. Advance Soft Compu. Appl*, Vol. 5, No. 3, pp.24-40, December 2013. ISSN: 2074-8523. (Scopus indexed).
 43. Mohd Z.M. Zaki, Dayang N.A. Jawawi, Norazian M. Hamdan, Shahliza Abd. Halim, Rosbi Mamat, Fairuz S. Mahat, and Nur Athirah Omar, "Multi-Criteria Architecture Style Selection for Precision Farming Software Product Lines Using Fuzzy AHP", *Int. J. Advance Soft Compu. Appl*, Vol. 5, No. 3, pp.1-23, December 2013. ISSN: 2074-8523. (Scopus indexed)
 44. Abid Mehmood and Dayang N. A. Jawawi, "Aspect-Oriented Modeling Approaches and Aspect Code Generation", *International Review on Computers and Software (IRECOS)*, Vol.8, No.4, pp.983-995, April 2013. ISSN:1828-6003 (Scopus indexed)
 45. Muhammad Imran Babar; Masitah Ghazali; Dayang N.A. Jawawi, "Software quality enhancement for value-based systems through stakeholders quantification", *Journal of Theoretical and Applied Information Technology*, Vol.55, No.3, pp.359-371, 30th September 2013. ISSN:1992-8645
 46. Abid Mehmood and Dayang N. A. Jawawi, A Text-Based Implementation Model for Reusable Aspect Models, *Journal of Theoretical and Applied Information Technology*, Vol. 55 No.2, pp.209-224, 20th September 2013. ISSN:1992-8645. (Scopus indexed)
 47. Abid Mehmood and Dayang N. A. Jawawi, "Reusable Aspect Models versus Theme/UML: The Aspect-Oriented Code Generation Perspective", *International Journal of Software Engineering and Its Applications (IJSEIA)*, Vol.7, No.6, pp.71-88, November 2013, <http://dx.doi.org/10.14257/ijseia.2013.7.6.07>. ISSN:1738-9984 (Scopus Indexed)
 48. Abid Mehmood and Dayang N. A. Jawawi, "An Approach for Aspect-Oriented Model-Driven Skeleton Code Generation", *Journal of Theoretical and Applied Information Technology*, Vol. 58, No.1, 10th December 2013, pp.60-71. ISSN:1992-8645. (Scopus indexed).
 49. Muhammad Waqar Aziz, Radziah Mohamad, Dayang N. A. Jawawi, Critical Evaluation of two UML Profiles for Distributed Embedded Real-Time Systems Design, *International Journal of Software Engineering and Its Application (IJSEIA)*, Vol. 7, No. 3, pp.137-146, May 2013.
 50. Abid Mehmood and Dayang N. A. Jawawi, "Aspect-Oriented Code Generation for Integration of Aspect Orientation and Model-Driven Engineering," *International Journal of Software Engineering and Its Applications*, Vol. 7, No.2, pp. 207-218, March 2013. (Scopus Indexed).

51. Isa, M. A., Zaki, M. Z., & Jawawi, D. N., "A Formal Semantic for Scenario-Based Model Using Algebraic Semantics Framework for MOF", *International Journal of Software Engineering and Its Applications*, Vol. 7, No.1, pp. 107-122, January 2013. (Scopus Indexed).
52. Vahid Khatibi, Dayang Norhayati Abang Jawawi and Elham Khatibi, Investigating the Effects of Using Methodology on Development Effort in Software Project, *International Journal of Software Engineering and Its Applications*, 6(2): 35-46, April 2012 (Scopus Indexed).
53. Vahid Khatibi, Dayang Norhayati Abang Jawawi, Siti Zaiton Mohd Hashim and Elham Khatibi, A New Fuzzy Clustering Based Method to Increase the Accuracy of Software Development Effort Estimation, *World Applied Sciences Journal*, 2011, 14(9):1265-1275. ISSN: 1818-4952 (Scopus and ISI indexed).
54. Vahid Khatibi, Dayang Norhayati Abang Jawawi, Siti Zaiton Mohd Hashim, Neural Networks for Accurate Estimation of Software Metrics, *International Journal of Advancement in Computing Technology*, 3(10):54-66, ISSN:2005-8039, 2011. (Scopus Indexed).
55. Dayang Norhayati Abang Jawawi, Radziah Mohamad, Rosbi Mamat, Safaai Deris dan Mohd Zulkifli Mohd Zaki (2010). "Pendekatan Permodelan Masa untuk Analisa Penjadualan dalam Pembangunan Perisian Berasaskan Komponen.", *Jurnal Teknologi*, 52, Mei 2010, pp. 117-133. (Scopus Indexed).

Non-Indexed

1. Rabatul Aduni Sulaiman, Dayang Norhayati Abang Jawawi, Shahliza Abd Halim, "The Used of Genetic Algorithm to Prioritize Test Cases", *International Journal of Software Engineering and Technology*, VOL 4, NO 2 (20), 7-11, December 2018.
2. Safwan Abd Razak, Mohd Adham Isa, Dayang Norhayati Abang Jawawi, "Similarity Based Prioritization using Mandatory-Optional-Aided Ordered Sequence", *International Journal of Software Engineering and Technology*, VOL 4, NO 2 (20), 1-6, December 2018.
3. Younas Muhammad, Dayang Norhayati Abang Jawawi, Imran Ghani, Muhammad Arif Shah, Mustafa Ahmad, "Extraction of Non-Functional Requirement using Word2Vec Model", *International Journal of Software Engineering and Technology*, VOL 4, NO 1 (20), 29-43, June 2018.
4. Karzan Wakil, Dayang N. A. Jawawi, "Increasing usability for web engineering methods", *Review of Computer Engineering Studies*, 4(3), September 2017.
5. K Wakil, D. N. A. Jawawi, "Extensibility Interaction Flow Modeling Language Metamodels to Develop New Web Application Concerns", *Kurdistan Journal of Applied Research*, 2(3), August 2017.
6. K Wakil, D. N. A. Jawawi, "Comparison between Web Engineering Methods to Develop Multi Web Applications", *Journal of Software*, 12(10), 783-793, October 2017.

7. Nur Syafiqah Zahirah Abdul Rahman, Dayang N. A. Jawawi, Noor Azurati Ahmad@Salleh, Rusli Abdullah, "Selecting UML Models for Generation of Test Cases: An Experiments of Technique to Generate Test Cases", *International Journal of Software Engineering and Technology* 03(1) 30-45, 2017.
8. Fakhitah Ridzuan, Dayang N. A. Jawawi, Rosbi Mamat, "Evaluation of Computer Programming Teaching Tools for Secondary Schools Students", *International Journal of Software Engineering and Technology* 03(1) 1-9, 2017.
9. Faten Alia Zainal Abidin, Dayang N.A. Jawawi and Imran Ghani, "Agile Transition Model Based on Human Factors", *International Journal of Innovative Computing* 7(1) 23-32, 2017.
10. K Wakil, DNA Jawawi, "Combining web engineering methods to cover lifecycle", *Computer Modelling & New Technologies* 21 (1), 20-27, 2017
11. Liang Fuh Ong, Mohd Adham Isa, Dayang Norhayati Abang Jawawi, Safwan Abd Razak, "Meta-Heuristics Methods for Software Reliability Prediction: A Systematic Literature Review", *Journal of Emerging Trends in Computing and Information Sciences*, Vol. 7, No. 3 March 2016, ISSN 2079-8407.
12. Karzan Wakil, Amirhossein Safi and Dayang N.A. Jawawi, "A Comparison of Navigation Model between UWE and WebML: Homepage Development CaseStudy", *International Journal of Information and Education Technology (IJIET)*, Vol. 5, No. 9, September 2015, pp.650-655. ISSN: 2010-3689.
13. Mojtaba R.N.D, Dayang N.A.Jawawi, and Mohammad V. Malakooti, "An Effectiveness Test Case Prioritization Technique for Web Application Testing", *International Journal of Digital Information and Wireless Communications (IJDIWC)*, Vol.3, No.4, pp.451-459, 2013. ISSN: 2225-658X
14. Isa, M. A., Zaki, M. Z., & Jawawi, D. N. (2013). A Survey of Design Model for Quality Analysis: From a Performance and Reliability Perspective. *Computer and Information Science*, Vol.6, No.2, pp.55, March 2013. ISSN: 1913-8989
15. Awad Ali, Moawia Elfaki, Dayang N. A. Jawawi, Using Naïve Bayes and Bayesian Network for Prediction of Potential Problematic Cases in Tuberculosis, *International Journal of Informatics and Communication Technology (IJ-ICT)*, Vol. 1, No.2, December 2012, pp. 63-71, ISSN: 2252-8776.
16. Alawi Abdullah Ahmed Al-sagaf and Dayang Norhayati Abang Jawawi. "Standard Monitor Design for SLA Parameters in SOA". *International Journal of Computer Applications* 45(9):43-48, May 2012. Published by Foundation of Computer Science, New York, USA.
17. Vahid Khatibi, Dayang N. A. Jawawi, "Software Cost Estimation Methods: A Review", *Journal of Emerging Trends in Computing and Information Sciences*, Vol. 2, No. 1, January 2011, pp. 21-29.
18. Siti Nurmaini, Siti Zaiton, Dayang Norhayati "Modular Weightless Neural Network Architecture for Intelligent Navigation," *International Journal Advance Soft Computing Application*, Vol. 1, No. 1, July 2009.
19. Dayang Norhayati Abang Jawawi, Safaai Deris and Rosbi Mamat. "Software Reuse for Mobile Robot Applications through Analysis Patterns", *The International Arab Journal of Information Technology*, Vol. 4, No. 3, July 2007, pp. 220-228.

20. Dayang Norhayati Abang Jawawi, Safaai Deris and Rosbi Mamat. (2006). "A Component-Oriented Programming for Embedded Mobile Robot Software", *The International Journal of Advanced Robotic Systems*, Vol. 4, No. 2, September 2007, pp. 371-380. DOI 10.5772/1.
21. Dayang Norhayati Abang Jawawi, Safaai Deris and Rosbi Mamat, "Application of Component-based Analysis Patterns for Pattern-based Reverse Engineering of Mobile Robot Software." *Malaysian Journal of Computer Science*, Vol. 18, No. 1, June 2005, pp. 20-30.
22. Radziah Mohamad, Dayang Norhayati Abang Jawawi, Safaai Deris and Rosbi Mamat, "Formal Specification of a Wall-Climbing Robot Using Z – A Case Study of Small-Scale Embedded Hard Real-Time System", *Jurnal Teknologi D: Control, Electronics, Telecommunications and IT*, No. 34 (D) Jun 2001, pp.25-40.
23. Dayang Norhayati Abg. Jawawi, Radziah Mohamad, Safaai Deris and Rosbi Mamat, "Pembangunan Perisian untuk Sistem Terbenam Masa Nyata Menggunakan Prinsip-prinsip Kejuruteraan Perisian", *Jurnal Teknologi Maklumat*, Jilid 13, Bil. 1, 56-67, Jun 2001.
24. Dayang Norhayati Abang Jawawi., Safaai Deris and Rosbi Mamat, "Evaluation of Real-Time Software Engineering Methodologies for Developing a Wall-Climbing Robot Control Firmware." *Elektrika Journal of Electrical Engineering*, Vol. 3, No. 1, September 2000, pp. 54-60.
25. Dayang Norhayati Abang Jawawi, "Intelligence Student Advising System – An Implementation using Object-oriented C++", *Jurnal Teknologi Maklumat*, Jilid 9, Bil. 2, Dec. 1997.

7.3. International Conferences

1. A. Manan, Muhammad Syafiq, Jawawi, Dayang N.A., Abd Halim, Shahliza, Suvelayutnan, Ushananthiny and Mohamad, Mohamad Noor Hakim, "Reusable patient navigation system architecture using component-based approach", The 12th International Conference on Internet (ICONI 2020), pp. 52-57, 2020.
2. Kamil, M. Irsyad, Jawawi, Dayang N.A. and Mamat, Rosbi, "An enhanced string algorithm prioritizing technique", The 12th International Conference on Internet (ICONI 2020), pp. 83-87, 2020.
3. Jamal, Nurul N., Jawawi, Dayang N.A., Hassan, Rohayanti and Kamil, M. Irsyad, "Integration of artificial intelligence in adaptive learning model", The 12th International Conference on Internet (ICONI 2020), pp. 100-105, 2020.
4. Khatibsyarbini, Muhammad, Isa, Mohd Adham and Jawawi, Dayang N.A. "Weighted distance-based: an enhanced string technique for test case prioritization", The 12th International Conference on Internet (ICONI 2020), pp. 58-63, 2020.
5. Md Nor Basmmi, Ain Balqis, Abd Halim, Shahliza, and Jawawi, Dayang N. A. "Business process feature model in identifying potential core assets", The 12th International Conference on Internet (ICONI 2020), pp. 300-305, 2020.

6. M. Ashari, Afifah, A. Halim, Shahliza, Jawawi, Dayang N. A. and Suvelayutnan, Ushananthiny "Extended feature model for quality attribute identification in software product line architecture", The 12th International Conference on Internet (ICONI 2020), pp. 306-311, 2020.
7. Podari, Z., Arbain, A.F., Ibrahim, N., Abang Jawawi, D.N., Nasir Wan Kadir, W.M., Fahmi, A.M. "Systematic Literature Review on Global Software Development Risks in Agile Methodology", The 8th International Conference on Information Technology Multimedia, ICIMU2020), 9243311, pp. 231-236, 2020.
8. Sulaiman, R., Jawawi, D.N.A., Halim, S.A. "Features and behaviours mapping in model-based testing in software product line", IOP Conference Series: materials Science and Engineering, 884(1), 012052, 2020.
9. Mohamad, N., Ahmad, N.B., Jawawi, D.N.A., Hashim, S.Z.M. "Feature engineering for predicting MOOC performance", IOP Conference Series: materials Science and Engineering, 884(1), 012070, 2020.
10. Ismail. H., Jawawi, D.N.A., Ahmedy, I., Isa, M.A. "Performance comparison of partitioned and global approaches for weakly hard real-time systems", IOP Conference Series: materials Science and Engineering, 884(1), 012050, 2020.
11. Nsaif, H.N., Norhayati Abang Jawawi, D. "Binary black hole-based optimization for T-way Testing", IOP Conference Series: materials Science and Engineering, 884(1), 012073, 2020.
12. Irsyad Kamil, R.M., Jawawi, D.N.A., Mamat, R., Jamal, N.N. "Indoor smart wheelchair: systematic mapping", IOP Conference Series: materials Science and Engineering, 864(1), 012070, 2020.
13. Jamal, N.N., Jawawi, D.N.A., Hassan, R., Irsyad Kamil, R.M. "Adaptive learning in computing education: a systematic mapping study", IOP Conference Series: materials Science and Engineering, 864(1), 012069, 2020.
14. Tumeng, Rooster, A. Jawawi, Dayang N., Isa, Mohd. Adham; "An enhanced latent semantic indexing with term frequency-inverse document frequency variant for software traceability" IOP Conference Series: Materials Science and Engineering, 551(1), 012073, 2019.
15. Mehmood A, Jawawi, D.N.A., Zeshan, F., "An Approach mapping the aspect state models to aspect-oriented code", 2019 International Conference on Engineering and Emerging Technologies, ICEET 2019, 8711837
16. Mehmood, Abid, A. Jawawi, Dayang N., Zeshan, Furkh "An approach for mapping the aspect state models to aspect-oriented code" 2019 International Conference on Engineering and Emerging Technologies, ICEET, 8711837, 2019.
17. Elsafi, Abubakar, A. Jawawi, Dayang N., Abdelmaboud, Abdelzahir, Ibrahim, Ashraf Osman, Almahi, Ibrahim; "An effective model-based integration testing technique for component-based software" 2019 International Conference on Computer and Information Sciences, 8716446, pp. 23-28, 2019.
18. Ismail, H; Jawawi, DNA; Ahmedy, I; Isa, MA "An Effective Model-Based Integration Testing Technique for Component-Based Software", Engineering Application of Artificial Intelligence Conference (EAAIC), Malaysia; DEC 03-05,

2018; Book Series: MATEC Web of Conferences Volume: 255 Article Number: UNSP 05004 Published: 2019.

19. Jawawi, D.N.A., Ibrahim, N.a, Halim, S.A., Mamar, R., Mohamed, N., Tumeng, R., "Adaptation of Project-Oriented Problem-Based Framework for Teaching Computer Programming", Proceedings - 2017 7th World Engineering Education Forum, WEEF 2017, Berjaya Times Square Hotel, Kuala Lumpur; Malaysia; 13 November 2017 through 16 November 2017; 17 September 2018, Article number 8467073, Pages 844-849.
20. Karzan Wakil, Dayang N A Jawawi, "A new adaptive model for web engineering methods to develop modern web applications", ACM International Conference Proceeding Series 2018 International Conference on Software Engineering and Information Management, ICSIM 2018 and its Workshop 2018 International Conference on Big Data and Smart Computing, ICBDS 2018; Casablanca; Morocco; 4 - 6 January 2018, Pages 32-39.
21. Sharif, S.A., Suhaimi, M.S., Jamal, N.N., Riadz, I.K., Amran, I.F., Jawawi, D.N.A., "Real-Time campus university bus tracking mobile application", Proceeding of 2018 7th ICT International Student Project Conference, ICT-ISPC 2018 5 November 2018, Article number 8523915, 7th ICT International Student Project Conference, ICT-ISPC 2018; Faculty of ICT, Mahidol University (MU)Nakhon Pathom; Thailand; 11-13 July 2018.
22. Rooster Tumeng, Dayang N.A. Jawawi, Mohd Adham Isa, "Evaluation of Information Retrieval Methods for Requirement Traceability", The 7th International Graduate Conference on Engineering, Science, And Humanities, 13-15 August 2018, Skudai, Malaysia, page 573-576.
23. Rifaqat Kazmi, Dayang N.A. Jawawi, Radziah Mohamad, Imran Ghani, Israr Ghani, Yeonjin Ju, 1Seung Ryul Jeong, "An Empirical Evaluation of Framework for Regression Test Case Selection: Weighted Average Scoring", in the Proceedings of KSII The 9th International Conference on Internet (ICONI) 2017, Dec. 17-20, 2017 Landmark Mekong Riverside Hotel, Vientiane, Laos, pp. 5-8.
24. Dayang N.A. Jawawi and Imran Ghani, "Agile Transition Model Based On Human Factors", in the Proceedings of Postgraduate Research Workshop@SOFTEC Asia 2016, 5 September 2016- Mandarin Oriental Hotel, Kuala Lumpur, pp. 19-24.
25. Noor Azean Atan, Azizah Yusof, Norhidayah Abdul Hassan, Noor Dayana Abd Halim, Che Ros Bin Ismail, Dayang Norhayati Abang Jawawi, "UTM Massive Open Online Courses Development Process: A Guide in Designing", in th Proceeding International Conference on Education and Higher Order Thinking Skills 2016, 11-13 April 2016, Skudai, Johor, pp. 19-28.
26. Muhammad Imran Babar, Muhammad Jehanzeb, Masitah Ghazali, Dayang N.A. Jawawi, Falak Sher, Shahbaz Ahmed Khan Ghayyu, "Big Data Survey In Healthcare and A Proposal for Intelligent Data Diagnosis Framework", in The Proceeding 2016 2ND IEEE International Conference on Computer and Communications (ICC), 14 -17 October 2017, Chengdu, China, pp. 7-12.
27. Nursafurra Abdul Majid and Dayang N.A. Jawawi "Requirements Engineering Approaches in Software Product Line", in the Proceedings of Postgraduate

- Research Workshop@SOFTEC Asia 2016, 5 September 2016- Mandarin Oriental Hotel, Kuala Lumpur, pp. 37-42.
28. Faten Alia binti Zainal Abidin, Dayang N.A. Jawawi and Imran Ghani, "Agile Transition Model Based on Human Factors", in the Proceedings of Postgraduate Research Workshop@SOFTEC Asia 2016, 5 September 2016- Mandarin Oriental Hotel, Kuala Lumpur, pp. 19-24.
 29. Muhammad Bin Sahak, Dayang N.A. Jawawi and Shahliza Abd Halim, "Comparison of Similarity Measures in Software Product Lines Test Case Prioritization", in the Proceedings of Postgraduate Research Workshop@SOFTEC Asia 2016, 5 September 2016- Mandarin Oriental Hotel, Kuala Lumpur, pp. 37-42.
 30. Nor Bahiah Ahmad, Dayang Norhayati Abang Jawawi, Najwa Azmi and Nadirah Mohamad, "Authentic Learning Environment for the Implementation of Data Structure Subject Through MOOC: A pilot study", in the Proceedings of the 6th Regional Conference on Engineering Education 2016 (RCEE2016), 9-10 August 2016- Universiti Teknologi Malaysia, Kuala Lumpur, pp. 221-226.
 31. Dayang N. A. Jawawi, Shahliza Abdul Halim, Radziah Mohamad, Rosbi Mamat, Hasnah Mohamed, Noraniah Mohd Yassin, Noraini Ibrahim and Raja Zahilah, "Cultivating Communication and Teamwork Skills to Undergraduates in Co-Curricular Service Learning", in the Proceedings of the 6th Regional Conference on Engineering Education 2016 (RCEE2016), 9-10 August 2016- Universiti Teknologi Malaysia, Kuala Lumpur, pp. 296-302.
 32. Awad Ali, Dayang N.A. Jawawi, Mohd Adham Isa, and Ashraf Osman Ibrahim, "Deriving Behavioural Models of Component-Based Software Systems from Requirements Specifications", International Conference on Computing, Control, Networking, Electronics and Embedded Systems Engineering (ICCNEEE), 7 – 9 September 2015, Corinthia Hotel, pp.260-265. (ISI Index)
 33. Rooster Tumeng, Dayang N. A. Jawawi, Mohd Adham Isa, "Test Case Prioritization with Textual Comparison Metrics", The 9th Malaysian Software Engineering Conference (MySEC), 16 – 17 December 2015, Mines Wellness Hotel, Seri Kembangan, pp.7-12. (Scopus Index)
 34. Habibah Ismail, Dayang N. A. Jawawi, Mohd Adham Isa, "A Weakly Hard Real-Time Tasks on Global Scheduling of Multiprocessor Systems", The 9th Malaysian Software Engineering Conference (MySEC), 16 – 17 December 2015, Mines Wellness Hotel, Seri Kembangan, pp.123-128. (Scopus Index)
 35. Mohammad Irfan Mohammad Saidi, Mohd Adham Isa, Dayang N.A. Jawawi, L.F. Ong, "A Survey of Software Reliability Growth Model Selection Methods for Improving Reliability Prediction Accuracy", The 9th Malaysian Software Engineering Conference (MySEC), 16 – 17 December 2015, Mines Wellness Hotel, Seri Kembangan, pp.200-205. (Scopus Index)
 36. Karzan Wakil, Dayang N.A. Jawawi, Mohd Adham Isa, "Analyzing Modern Web Applications to Recognize Features-based Web Engineering Methods", The 7th

- International Conference on Internet (ICONI), 13 – 16 December 2015, Grand Millennium Hotel, Kuala Lumpur, pp.59-67.
37. Mojtaba Raeisi Nejad Dobuneh, Dayang N. A. Jawawi, Mohd Adham Isa, Arash Khosravi, Mojtaba Vahidi Asl, "A New Dynamic Prioritization Technique for Web Application Regression Testing", The 7th International Conference on Internet (ICONI), 13 – 16 December 2015, Grand Millennium Hotel, Kuala Lumpur, pp.213-216.
 38. N.S. Zahirah A. Rahman, Dayang N.A. Jawawi, Salleh N.A.A., M.A. Isa, "Model-Based Test Case Generation and Optimization Using UML Diagram: A Research Proposal", Postgraduate Research Workshop@SOFTEC Asia 2015, 7th September 2015, Mandarin Oriental Hotel, Kuala Lumpur, pp.10-15.
 39. Mohammad Irfan Mohammad Saidi, Mohd Adham Isa, Dayang N.A. Jawawi, "Distance-based Approach for Software Reliability Growth Model Selection", Postgraduate Research Workshop@SOFTEC Asia 2015, 7th September 2015, Mandarin Oriental Hotel, Kuala Lumpur, pp.38-43.
 40. Rooster Tumeng, Dayang N. A. Jawawi, M.A. Isa, "Test Case Prioritization with Jaro-Winkler-Manhattan Textual Distance", Postgraduate Research Workshop@SOFTEC Asia 2015, 7th September 2015, Mandarin Oriental Hotel, Kuala Lumpur, pp.49-54.
 41. Dayang N. A. Jawawi, Rosbi Mamat, Fakhitah Ridzuan, Muhammad Khatibsyarbini, M. Zulkifli M. Zaki, "Introducing Computer Programming to Secondary School Students using Mobile Robots", The 10th Asian Control Conference 2015 (ASCC 2015), 31th May 2015 – 3rd June 2015, Sutera Harbour Resort Kota Kinabalu Sabah, pp. (ISI indexed).
 42. Falak Sher, Dayang N. A. Jawawi, Radziah Mohamad, "Multi-Aspects Based Requirements Prioritization Technique for Value-Based Software Developments", The 10th International Conference on Emerging Technologies (ICET 2014), pp.1-6, December 2014. ISSN: 9781479960897. (Scopus indexed).
 43. Karzan Wakil, Dayang N. A. Jawawi, Radziah Mohamad, "Metamodels Evaluation of Web Engineering Methodologies to Development Web Applications", First International Scientific Conference, 1-2 April 2014, Sulaimani, Kurdistan Region of Iraq, Vol.5, No.5, pp. 47-63.
 44. Falak Sher, Dayang N. A. Jawawi, Radziah Mohamad, Muhammad Imran Babar, "Requirements Prioritization Techniques and Different Aspects for Prioritization: A Systematic Literature Review Protocol", 2014 8th Malaysian Software Engineering Conference (MySEC), 23 - 24 September 2014, Resort World Langkawi, pp.31-36. (Scopus indexed).
 45. Muhammad Abubakar Alhassan, Dayang N. A. Jawawi, "Sequential Strategy for Software Process Measurement that Uses Statistical Process Control", 2014 8th Malaysian Software Engineering Conference (MySEC), 23 - 24 September 2014, Resort World Langkawi, pp.37-42. (Scopus indexed).

46. Muhammad Imran Babar, Masitah Ghazali, Dayang N. A. Jawawi, "Systematic Reviews in Requirements Engineering: A Systematic Review", 2014 8th Malaysian Software Engineering Conference (MySEC), 23 - 24 September 2014, Resort World Langkawi, pp.43-48. (Scopus indexed).
47. Abubakar Elsafi, Dayang N.A. Jawawi, Abdelzahir Abdelmaboud, "Inferring Approximated Models for Integration Testing of Component-based Software", 2014 8th Malaysian Software Engineering Conference (MySEC), 23 - 24 September 2014, Resort World Langkawi, pp. 67-71. (Scopus indexed).
48. Habibah Ismail, Dayang N. A. Jawawi, "A Schedulability Analysis for Weakly Hard Real-Time Tasks in Partitioning Scheduling on Multiprocessor Systems", 2014 8th Malaysian Software Engineering Conference (MySEC), 23 - 24 September 2014, Resort World Langkawi, pp.108-112. (Scopus indexed).
49. Abid Mehmood, Dayang N. A. Jawawi, "A Quantitative Assessment of Aspect Design Notations with Respect to Reusability and Maintainability of Models", 2014 8th Malaysian Software Engineering Conference (MySEC), 23 - 24 September 2014, Resort World Langkawi, pp.136-141. (Scopus indexed).
50. Awad Ali, Dayang N.A. Jawawi, Mohd Adham Isa, "Modeling and Calculation of Scenarios Reliability in Component-Based Software Systems", 2014 8th Malaysian Software Engineering Conference (MySEC), 23 - 24 September 2014, Resort World Langkawi, pp.160-165. (Scopus indexed).
51. Mojtaba Raeisi Nejad Dobuneh, Dayang N.A. Jawawi, Masitah Ghazali, Mohamad V. Malakooti, "Development Test Case Prioritization Technique in Regression Testing Based on Hybrid Criteria", 2014 8th Malaysian Software Engineering Conference (MySEC), 23 - 24 September 2014, Resort World Langkawi, pp.301. (Scopus indexed).
52. Amirhossein Safi, "Web Services Composition with Redundancy Consideration", IEEE Conference on Open Systems (ICOS2013), December 2-4, 2013, Sarawak, Malaysia, pp.178-183.
53. Mojtaba R.N.D, Dayang N.A.Jawawi, and Mohammad V. Malakooti, "Web Application Regression Testing: A Session Based Test Case Prioritization Approach", in The International Conference on Digital Information Processing, E-Business and Cloud Computing (DIPECC 2013), Dubai, UAE, pp 107-112, October 23-25, 2013.
54. Awad Ali and Dayang N.A. Jawawi, "Architecture-Based Software Reliability Prediction Approach for Component Based Software", in the Proceedings of Postgraduate Research Workshop@SOFTEC Asia 2013, 2 September 2013-Sunway Resort Hotel&Spa, Kuala Lumpur, pp. 12-17.
55. Ako A. Jaafar and Dayang N. A. Jawawi, "Integration Islamic Banking System Based on Service Oriented Architecture and Enterprise Service Bus", Advances in Intelligent Systems and Computing Volume 225, The 3rd International Conference on Computational Science, Engineering and Information Technology, CCSEIT 2013; Konya; Turkey, Vol. 225, pp 131-140, 2013. (Scopus Indexed)
56. Abid Mehmood and Dayang N. A. Jawawi, "A Systematic Map of Integration of Aspect Orientation and Model-Driven Engineering", in 2012 International

- Conference on Open Source Systems and Technologies (ICOSST), Lahore, Pakistan, 2012, 20-22 Dec. 2012, pp. 1-6. pp.
57. Nansukusa Yudaya, Dayang N. A. Jawawi, "Embedded Systems Test Case Generation with Use Case: A Research Proposal" in the Proceedings of Postgraduate Research Workshop@SOFTEC 2012, July 10-12, 2012-Kuala Lumpur, pp. 18-23.
 58. Abubakar Elsafi Ali Ahmed, Dayang N. A. Jawawi, "Evaluation of Integration Testing Techniques for Component-Based Software" in the Proceedings of Postgraduate Research Workshop@SOFTEC 2012, July 10-12, 2012-Kuala Lumpur, pp. 29-33.
 59. Mahmood Aghajani Siroos Talab and Dayang N. A. Jawawi, "An Implementation of Embedded Real Time System Framework in Service Oriented Architecture", The 4th International Conference on Cyber-Enabled Distributed Computing and Knowledge Discovery, CyberC2012, China, 2012.
 60. Khatibi, B., V., Dayang. N. A. Jawawi and E. Khatibi, "Increasing the Accuracy of Analogy Based Software Development Effort Estimation Using Neural Networks," presented at the International Conference on Software and Computer Engineering, Singapore, 2012.
 61. Muhamad Waqar Aziz, Radziah Mohamad, Dayang Norhayati Abang Jawawi, "Soa4derts: a Service-oriented UML Profile for Distributed Embedded Real-time Systems" in the Proceedings of 2012 IEEE Symposium on Computers and Informatics (ISCI 2012), Penang, 18-20 March 2012, pp.64-69. (SCOPUS, IEEE).
 62. Habibah Ismail, Yavuz Selim Sengoz, Dayang N. A. Jawawi, "The Comparative Evaluation of UML Profile for Hard and Weakly Hard Real-Time Systems", The Brunei International Conference in Engineering and Technology (BICET 2012), 25-26 January 2012, Brunei Darussalam, pp. 137-148.
 63. Shahliza Abd Halim, Zulkifli Zaki, Noraini Ibrahim, Dayang N. A. Jawawi Safaai Deris, "Mapping Architecture Concept to SYSML Profile for Product Line Architecture Modeling" The Sixth IEEE International Conference on Software Engineering Advances (ICSEA2011), October 23-28, 2011 – Barcelona, Spain (published in IEEE Publication – Scopus Indexing).
 64. Abid Mehmood and Dayang N. A. Jawawi, "A Comparative Survey of Aspect-oriented Code Generation Approaches", IEEE Conference on The Fifth Malaysian Software Engineering Conference, December 13-14 2011, Johor Bahru, Malaysia.
 65. M.A. Isa and Dayang N. A. Jawawi, "An Intermediate Metamodel for Failure-Based Behavior of Performance and Reliability", IEEE Conference on The Fifth Malaysian Software Engineering Conference, December 13-14 2011, Johor Bahru, Malaysia.
 66. Habibah Ismail and Dayang N. A. Jawawi, "The Adoption of UML-MARTE Profile for Weakly Hard Real-Time Requirements", IEEE Conference on The Fifth Malaysian Software Engineering Conference, December 13-14 2011, Johor Bahru, Malaysia.
 67. Muhamad Waqar Aziz, Radziah Mohamad, Dayang Norhayati Abang Jawawi, "Evaluation of UML MARTE, SoaML profiles for Distributed Embedded Real-

- Time Systems Development" in the Proceedings of the 5th. Malaysian Software Engineering Conference (MySEC), Johor Bahru, 2011. (SCOPUS, IEEE)
68. Mahmood Aghajani Siroos Talab and Dayang N. A. Jawawi, "A Code Generator for Component Oriented Programming Framework", IEEE Conference on Open Systems (ICOS2011), September 25-28 2011, Langkawi, Malaysia, pp.178-183.
 69. Mohd Z. M. Zaki, M. A. Isa and Dayang N. A. Jawawi, (2011) "Meta-model Validation of Integrated MARTE and Component-Based Methodology Component Model for Embedded Real-Time Software", Communications in Computer and Information Science, 1, Volume 181, Software Engineering and Computer Systems, Part 1, Pages 246-256.
 70. Habibah Ismail and Dayang N. A. Jawawi, (2011) "The Specifications of the Weakly Hard Real-Time Systems: A Review", Communications in Computer and Information Science, 1, Volume 181, Software Engineering and Computer Systems, Part 1, Pages 274-288.
 71. M. A. Isa and Dayang N. A. Jawawi, (2011) "Comparative Evaluation of Performance Assessment and Modeling Method for Software Architecture", Communications in Computer and Information Science, 1, Volume 181, Software Engineering and Computer Systems, Part 1, Pages 764-766.
 72. Mohd. Z. M. Zaki; Dayang N. A. Jawawi, Model-based methodology for implementing MARTE in embedded real-time software, 2011 IEEE Symposium on Computers & Informatics (ISCI), Kuala Lumpur, Malaysia, 20-22 March 2011, pp. 536 – 541.
 73. Muhamad Waqar Aziz, Radziah Mohamad, Dayang Norhayati Abang Jawawi, "Multiple Levels of Abstractions Modeling for Service Oriented Distributed Embedded Real-Time Software Design" in A. Abd. Manaf et al. (Eds.): ICIEIS 2011, Part I, CCIS 251, pp. 517-528, Springer-Verlag Berlin Heidelberg 2011. (ISI, SCOPUS).
 74. Vahid Khatibi and Dayang Norhayati Abang Jawawi, "Decreasing the Software Project Failures by Using Accurate Estimations", The 3rd International Conference on Computer and Automation Engineering, (ICCAE 2011), 21-23, January 2011, Chongqing, China, V2-38-V2-44.
 75. Mohd Adham Isa, Dayang Norhayati Abang Jawawi, "Enhancing the Rapid Object Process for Embedded System (ROPES) Metamodel to Support Pattern Oriented Development," Second International Conference on Computer Research and Development 2010 (ICCRD), pp.255-259.
 76. Mohd Zulkifli Zaki, Dayang Norhayati Abang Jawawi (2009), "A Review on Component-Based Development Methodologies for UML Profiles for MARTE", The First APSEC 2009 Workshop & Tutorial and Software Engineering Postgraduates Workshop (SEPoW 2009), Penang, Malaysia, 30 Nov. 2009, pp.35-40.
 77. Suzila Sabil, Dayang Norhayati Abang Jawawi (2009), "Mapping Metamodel of MARMOT Method into PECOS Component Infrastructure", The First APSEC 2009 Workshop & Tutorial and Software Engineering Postgraduates Workshop (SEPoW 2009), Penang, Malaysia, 30 Nov. 2009, pp. 29-34.

78. Shahliza Abd Halim, Dayang Norhayati Abang Jawawi (2009), "Requirement Identification and Representation in Software Product Line", The 16th Asia-Pacific Software Engineering Conference (APSEC 09), Batu Feringgi, Penang, Malaysia, 1st -3rd Dec. 2009, pp. 340-346 (ISI and Scopus indexed).
79. Yavuz Selim Sengoz, Dayang Norhayati Abang Jawawi, "The Mapping of UML-SPT and Schedulability Analysis for Predictable Real-Time Design", Proceedings International Conference on Software Engineering 7 Computer Systems (ICSECS 09), Kuantan, Pahang, Malaysia, 19th - 21st Oct 2009, pp. 574-580.
80. Suzila Sabil, Dayang Norhayati Abang Jawawi (2009), "Integration of Pecos Into Marmot for Embedded Real-Time Software Component-Based Development", The Fourth International Conference on Software Engineering Advances (ICSEA 2009), Porto, Portugal, Sept 2009, pp. 265-270 (Scopus indexed).
81. Suzila Sabil, Dayang Norhayati Abang Jawawi, "Marmot and Pecos Hybrid Approach for Embedded Real Time Software Development", The 5th International Conference on Information & Communication Technology and Systems (ICTS 2009), Surabaya, Indonesia, August 2009, pp. 213-220.
82. Radziah Mohamad, Dayang Norhayati Abang Jawawi, "Pattern-Oriented Framework for Agent-Oriented Multi Robot System", The 5th International Conference on Information & Communication Technology and Systems (ICTS 2009), Surabaya, Indonesia, August 2009, pp. 257-226
83. Yavuz Selim Sengoz, Dayang Norhayati Abang Jawawi, "The Integration of a Design Tool and a Schedulability Analysis Tool for Real_time", The 5th International Conference on Information & Communication Technology and Systems (ICTS 2009), Surabaya, Indonesia, August 2009, pp. 335-342
84. Suzila Sabil, Dayang Norhayati Abang Jawawi and Shahliza Abd Halim (2009), "Mapping MARMOT Process Model into PECOS Component Model Infrastructure for Embedded Real Time System", 3rd South East Asian Technical University Consortium (SEATUC) Symposium, Feb. 2009, pg. 241-246.
85. Sengoz, Y.S. Dayang Norhayati Abang Jawawi and Safai Deris, "Scheduling Analysis of An Autonomous Mobile Robot System using RapidRMA Tool", 3rd South East Asian Technical University Consortium (SEATUC) Symposium, Feb. 2009, pg. 421-427.
86. Siti Nurmaini, Siti Zaiton, Dayang Norhayati, "Environmental Recognition Using RAM-Network based Type-2 Fuzzy Neural of Mobile Robot", International Conference Control and Automation Engineering (ICCAE, 2009), Bangkok, Thailand, 8-10 March 2009, pg. 296-301. (ISI indexed).
87. Dayang Norhayati Abang Jawawi and Rosbi Mamat, "Teaching Embedded Real-Time Programming using Autonomous Mobile Robots for Undergraduates in Computer Science", International Conference on Control, Instrumentation and Mechatronics Engineering (CIM 2009), Malaca, 2-3 June 2009 pg. 236-240.
88. Siti Nurmaini, Siti Zaiton, Dayang Norhayati, "RAM Network based Type2 Fuzzy-Neural Controller for Mobile Robot", International Conference on Control, Instrumentation and Mechatronics Engineering (CIM 2009), Malaca, 2-3 June 2009, pg. 292-197.

89. Siti Nurmaini; Siti Zaiton; Dayang Norhayati, An embedded interval type-2 neuro-fuzzy controller for mobile robot navigation Conference Proceedings - IEEE International Conference on Systems, Man and Cybernetics. 2009:4315-4321:[5346800].
90. Dayang Norhayati Abang Jawawi, Radziah Mohammad, Safaai Deris and Rosbi Mamat, (2008). "Early-Life Cycle Reuse Approach for Component-Based Software of Autonomous Mobile Robot System", International Conference on Software Engineering Artificial Intelligent, Networking, and Parallel/Distributed Computing (SPDN2008), Phuket, Aug 6-8, 2008. pp. 263-268 (ISI indexed).
91. Mohd. Zulkifli Mohd. Zaki, Dayang Norhayati Abang Jawawi, Mohd Syahid Yasin, Mohd Khairul Rashid Khairuddin, Mohd Hafizuddin Mazlan and Rosbi Mamat. "A Small Robot for Teaching Embedded Real-Time Programming", 2008 Regional Student Conference on Research Development (SCORED2008), Skudai, November 2008.
92. Dayang Norhayati Abang Jawawi, Safaai Deris, Rosbi Mamat, (2007). "A Component-Oriented Approach for Developing Autonomous Mobile Robot Embedded Software", *International Conference on Control, Instrumentation and Mechatronics Engineering (CIM'07)*, Johor Bahru, 28-29 May 2007. pp. 843-850.
93. Dayang Norhayati Abang Jawawi, Safaai Deris and Rosbi Mamat. (2006). "Enhancements of PECOS Embedded Real-Time Component Model for Autonomous Mobile Robot Application". In *Proceeding of the 4th ACS/IEEE International Conference on Computer Systems and Applications*, Dubai/Sharjah, March 8-11 2006, pp. 882 – 889.
94. Dayang Norhayati Abang Jawawi, Safaai Deris, Rosbi Mamat, (2005). "Prediction of Real-Time Software Performance for Embedded Mobile Robot Applications using An Analytical Model", *International Advanced Technology Congress 2005, Conference on Intelligent Systems and Robotics*, Putrajaya, December 2005, ISBN 983-42758-1-1.
95. Dayang Norhayati Abang Jawawi, Safaai Deris, Rosbi Mamat, (2005). "An Approach to Reusable Software for Mobile Robot Applications through Analysis Patterns", *9th International Conference Mechatronics Technology*, Kuala Lumpur, December 2005, paper no. ICMT-144.
96. Dayang Norhayati Abang Jawawi, Rosbi Mamat and Safaai Deris, "Analysis Patterns for Component-based Development of Autonomous Mobile Robot Software." *Proc. Of The 2nd International Conference on Mechatronics 2005*, Vol. 1, 10-12 May 2005, Kuala Lumpur, pp. 185-192.
97. Dyg. Norhayati Abg. Jawawi, Safaai Deris and Rosbi Mamat, "Hardware-in-the-Loop Simulation for Testing and Verification of a Wall Climbing Robot Control Firmware", *Proceedings of 2nd World Engineering Congress WEC2002: Manufacturing Engineering, Automation & Robotics*, 22-25 July 2002, Sarawak, Malaysia, pp. 391-394.
98. Radziah Mohamad, Dyg. Norhayati Abg. Jawawi, Azah Kamilah Muda, Mohd. Iskandar Ilyas, "Development of Health Risk Assessment Software Using Object-

- Oriented Technology and Formal Method Techniques”, *Proceeding 2nd World Engineering Congress WEC2002*, Kuching, 22-25 July 2002, pp. 442-447.
99. Dyg. Norhayati Abg. Jawawi, Safaai Deris and Rosbi Mamat, “A Review of Real-Time Software Engineering Methodologies for Developing a Wall-Climbing Robot Control Firmware”, *Proceedings of IEEE Region 10 International Conference (TENCON 2000)*, September 2000, Kuala Lumpur, Vol. II, pp. 326-331.
 100. Dyg. Norhayati Abg. Jawawi, Safaai Deris and Rosbi Mamat, “Selecting A Real-Time Kernel for A Wall Climbing Robot Controller”, *Proceeding World Engineering Congress 1999 (WEC’99): Automation and Robotics*, 19 July 1999, Petaling Jaya, pp. 97-99.

7.3. National Conferences

1. Rabatul Aduni Sulaiman, Dayang N. A. Jawawi, Shahliza A. Halim, “Implementation of Feature Model and State Machine Diagram for Model-Based Testing in Software Product Line” Postgraduate Research Workshop@SOFTEC Asia 2017, 3 August 2017, Kuala Lumpur,
2. N.S. Zahirah A. Rahman, Dayang N.A. Jawawi, Salleh N.A.A., M.A. Isa, “Model-Based Test Case Generation and Optimization Using UML Diagram: A Research Proposal”, Postgraduate Research Workshop@SOFTEC Asia 2015, 7th September 2015, Mandarin Oriental Hotel, Kuala Lumpur, pp.10-15.
3. Mohammad Irfan Mohammad Saidi, Mohd Adham Isa, Dayang N.A. Jawawi, “Distance-based Approach for Software Reliability Growth Model Selection”, Postgraduate Research Workshop@SOFTEC Asia 2015, 7th September 2015, Mandarin Oriental Hotel, Kuala Lumpur, pp.38-43.
4. Rooster Tumeng, Dayang N. A. Jawawi, M.A. Isa, “Test Case Prioritization with Jaro-Winkler-Manhattan Textual Distance”, Postgraduate Research Workshop@SOFTEC Asia 2015, 7th September 2015, Mandarin Oriental Hotel, Kuala Lumpur, pp.49-54.
5. Habibah Ismail, Dayang N.A. Jawawi, “Weakly Hard Real-Time Scheduling on Multiprocessor Systems”, in *The 5th Software Engineering Postgraduate Workshop (SEPoW 2014)*, Resort World Langkawi, Malaysia, pp.1-6.
6. Mohanad Qusay Atta, Dayang N.A. Jawawi, “A Technical Design of A Reusable And Scalable Object Oriented Framework For Applying Dynamic Difficulty Adjustment in Video Games”, in *The 5th Software Engineering Postgraduate Workshop (SEPoW 2014)*, Resort World Langkawi, Malaysia, pp.22-27.
7. Abu Bakar AH.M, “A Study on Code Peer Review Process Monitoring using Statistical Process Control”, in *The 4th Software Engineering Postgraduate Workshop (SEPoW 2013)*, Melaka, Malaysia, pp.136-141.
8. Muhammad Imran Baba, Masitah Ghazali, Dayang N.A. Jawawi, “Considerations in Software Quality Enhancement for Value Based Systems”, *Malaysian Software Engineering Conference (MySEC)*, 2012.

9. Abubakar E. A. Ahmed, Dayang N. A. Jawawi, "Integration Testing Techniques for Component-based Software: A Systematic Review Protocol", Malaysian Software Engineering Conference (MySEC), 2012.
10. Abdelzahir Abdelmaboud, Dayang N. A. Jawawi, Imran Ghani, "Quality of Service Issues in Cloud Computing Research: A Systematic Literature Review Protocol", Malaysian Software Engineering Conference (MySEC), 2012.
11. Alawi Abdullah Al-Sagaf, Dayang Norhayati Abang Jawawi, "Framework for Measuring Performance Parameters SLA in SOA", The 3rd Software Engineering Postgraduate Workshop (SEPoW), 2011, pp. 6-11.
12. Vahid Khatibi. B, Dayang Norhayati Abang Jawawi, "An Analytical Model for Software Development Effort Estimation Based on Investigation of Project Characteristics", The 3rd Software Engineering Postgraduate Workshop (SEPoW), 2011, pp. 34-40.
13. Shahliza Abd Halim, Dayang Norhayati Abg Jawawi, Saafaai Deris, "Variability Integration in Software Product Line Core Assets", The 3rd Software Engineering Postgraduate Workshop (SEPoW), 2011, pp. 63-68.
14. Mohd Adham Isa, Dayang Norhayati Abg Jawawi, Saafaai Deris, "A Model-Based Approach for Performance and Reliability Analysis", The 3rd Software Engineering Postgraduate Workshop (SEPoW), 2011, pp. 69 -74.
15. Mahmood Aghajani Siroos Talab, Dayang Norhayati Abang Jawawi, " State Mechines Application in a Component Oriented Programming Framework", Software Engineering Postgraduate Workshop (SEPoW), 2010, pp. 23-27.
16. Muhammad Waqar Aziz, Radziah Mohamad, Dayang Norhayati Abang Jawawi, "A Comparative Evaluation of Development Methodologies for Distributed Embedded Real-Time System", Software Engineering Postgraduate Workshop (SEPoW), 2010, pp. 36-40.
17. Mohd Adham Isa, Dayang Norhayati Abang Jawawi, "A Study on Model-Driven Performance Engineering for Wireless Sensor Network (WSNs)," Software Engineering Postgraduate Workshop (SEPoW), 2010, pp. 36-40.]
18. Arbaie, M. Z., Jawawi, D. N. A., Halim, S. A., A study on Services Oriented Architecture for Autonomous Mobile Robot applications, Software Engineering Postgraduate Workshop (SEPoW), 2010, pp. 32-35.
19. Habibah Ismail, Dayang Norhayati Abang Jawawi, " A Framework of Weakly Hard Real-Time Systems on Autonomous Mobile Robot", Software Engineering Postgraduate Workshop (SEPoW), 2010, pp. 51-55.
20. Suzila Sabil, Dayang Norhayati Abang Jawawi, "Graphical Component Modeling Tool for Embedded Real Time Software", The 5th Postgraduate Annual Research Seminar (PARS 09), UTM, Johor, Malaysia, 15th – 19th June 2009, pp. 792-797.
21. Shahliza Abd, Dayang Norhayati Abang Jawawi, "Variability Integration at Requirement and Architecture Level in Software Product Line Engineering", The 5th Postgraduate Annual Research Seminar (PARS 09), UTM, Johor, Malaysia, 15th – 19th June 2009, pp. 852-857.
22. Mohd Zulkifli Mohd Zaki, Dayang Norhayati Abang Jawawi, "A Review on UML-RT and UML-SPT for Embedded Real Time Component-based Developmnet", The

- 5th Postgraduate Annual Research Seminar (PARS 09), UTM, Johor, Malaysia, 15th – 19th June 2009, pp. 735-740.
23. Yavuz Selim Sengoz, Dayang Norhayati Abang Jawawi, "A Comparison UML Tool for Real-Time Software Modeling", The 5th Postgraduate Annual Research Seminar (PARS 09), UTM, Johor, Malaysia, 15th – 19th June 2009, pp. 708-713.
 24. Mohd Adham Isa, Dayang Norhayati Abang Jawawi, "Enhancement of Rapid Object Process for Embedded System (ROPES) Metamodel to Support Pattern-Oriented Development", The 5th Postgraduate Annual Research Seminar (PARS 09), UTM, Johor, Malaysia, 15th – 19th June 2009, pp. 779-786.
 25. Siti Nurmaini, Dayang Norhayati Abang Jawawi, "Weightless Neural Network for Environmental Recognition", The 5th Postgraduate Annual Research Seminar (PARS 09), UTM, Johor, Malaysia, 15th – 19th June 2009, pp. 116-121.
 26. Suzila Sabil and Dayang Norhayati Abg Jawawi, "Application of MARMOT Method for Autonomous Mobile Robot", *Malaysian Software Engineering Conference (MySEC2008)*, December 2008, Kuala Terengganu.
 27. Mohd Zulkifli Mohd Zaki and Dayang Norhayati Abg Jawawi, "A Component-Based Development Approach for Embedded Real-Time Software with UML-RT", *Malaysian Software Engineering Conference (MySEC2008)*, December 2008, Kuala Terengganu.
 28. Shahliza Abd Halim, Dayang Norhayati Abg Jawawi and Safaai Deris, "Evaluation of Systematic Variability Management for Requirement to Architecture Concern in Software Product Line", *FSKSM Postgraduate Annual Research Seminar 2008 (PARS's 08)*, July 2008, Skudai.
 29. Suzila Sabil and Dayang Norhayati Abg Jawawi, "A Review on Current Component Technologies for Embedded Real-Time System", *FSKSM Postgraduate Annual Research Seminar 2008 (PARS's 08)*, July 2008, Skudai.
 30. Shahliza Abd Halim, Dayang Norhayati Abg Jawawi and Safaai Deris, "Generator Technologies Using Fundamental Methods in Software Product Line", *Malaysian Software Engineering Conference (MySEC2007)*, December 2007, Kuala Lumpur, pp. 111-115.
 31. Shahliza Abd Halim, Dayang Norhayati Abg Jawawi and Safaai Deris, "Underlying Software Product Line Methods and Generator Implementation", *FSKSM Postgraduate Annual Research Seminar 2007 (PARS's 07)*, July 2007, Skudai.
 32. Maheyzah Md. Sirat @ Md. Siraj, Siti Zaiton Mohd Hashim and Dayang Norhayati Abang Jawawi, "Self Healing Systems – A Fundamental Review", *FSKSM Postgraduate Annual Research Seminar 2007 (PARS's 07)*, July 2007, Skudai.
 33. Dayang Norhayati Abang Jawawi, Safaai Deris, Rosbi Mamat, (2006). "A Component-Oriented Programming Framework for Developing Embedded Mobile Robot Software using PECOS Model", *Second Malaysian Software Engineering Conference (MySEC'06)*, Kuala Lumpur, December 2006, pp. 255-261.
 34. Shahliza Abd Halim, Dayang Norhayati Abang Jawawi, and Safaai Deris, (2006). "Synergy between Generative Reuse and Software Product Line", *Second*

Malaysian Software Engineering Conference (MySEC'06), Kuala Lumpur, December 2006, pp. 273-277.

35. Dayang Norhayati Abang Jawawi, Safaai Deris and Rosbi Mamat, (2006). "A Temporal Modeling Approach for Schedulability Analysis in Component-Based Development", *Third National Real-Time Technology and Applications Symposium 2006 (RENTAS'06)*, December 2006, Kuala Lumpur.
36. Dayang Norhayati Abang Jawawi and Safaai Deris. (2006). "An Approach for Predictable Real-Time Software in Component-Based Software Development of Autonomous Mobile Robot Systems", *FSKSM Postgraduate Annual Research Seminar 2006 (PARS's 06)*, May 2006, Skudai, pp. 405-411.
37. Dayang Norhayati Abang Jawawi, Radziah Mohamad, Safaai Deris, Rosbi Mamat, (2005). "Transforming Pattern-Oriented Models into Component-Based Models for Embedded Real-Time Software Development", *First Malaysian Software Engineering Conference (MySEC'05)*, Penang, December 2005, pp. 18-23.
38. Dayang Norhayati Abang Jawawi, and Safaai Deris, (2005). "Experience in Adopting an Embedded Real-Time Component Model in Autonomous Mobile Robot Software Design", *FSKSM Postgraduate Annual Research Seminar 2005 (PARS's 05)*, May 2005, Skudai, pp. 109-113.
39. Dayang Norhayati Abang Jawawi, Rosbi Mamat and Safaai Deris, "Component-Based Software Engineering for Autonomous Mobile Robot Systems", *National Computer Science Postgraduate Colloquium 2005(NaCSOC'05)*, June 2005, Pulau Pinang.
40. Dayang N.A. Jawawi, Safaai Deris, Rosbi Mamat, "An Evaluation of Embedded Real-time Component Models for Autonomous Mobile Robot Software Development", *National Real-Time Technology and Applications Symposium (RENTAS 2004)*, University Putra Malaysia, Serdang, 24-25 Nov 2004, pp. 63-71.
41. Dayang N.A. Jawawi, Safaai Deris, Rosbi Mamat, "Deployment of Software Analysis Patterns for Component-Based Development of Embedded Real-time Mobile Robot Software", *National Real-Time Technology and Applications Symposium (RENTAS 2004)*, University Putra Malaysia, Serdang, 24-25 Nov 2004, pp. 72-79.
42. Dayang Norhayati Abg. Jawawi, Ahmad Zariman Abd. Majid, Ahmad Ruzaimie Abd. Rashid, Safaai Deris, Rosbi Mamat, Radziah Mohamad, "Evaluation of Hybrid Software Engineering Methodology for Development of Embedded Firmware for Intelligent Autonomous Mobile Robot", *Malaysian Science and Technology Congress MSTC*, Cititel MidValley, Kuala Lumpur, 23-25 September 2003.
43. Radziah Mohamad, Dayang Norhayati Abang Jawawi, Safaai Deris, Rosbi Mamat, "The Use of Formal Methods in Real-Time Systems", *Malaysian Science and Technology Congress MSTC*, Cititel MidValley, Kuala Lumpur, 23-25 September 2003.
44. Dayang Norhayati Abang Jawawi, Radziah Mohamad, Safaai Deris, Rosbi Mamat, "A Hybrid Software Engineering Methodology for Small-Scale Embedded Firmware Development", *Advanced Technology Congress 2003, Conference on*

Intelligent Systems and Robotics, Putrajaya Marriott Hotel, IOI Resort, KL, 20-21 May 2003.

45. Radziah Mohamad, Dayang Norhayati Abang Jawawi, Safaai Deris, Rosbi Mamat, "A Review of Formal Method Techniques for Specifying a Wall-Climbing Robot Control Firmware Requirement", *Advanced Technology Congress 2003, Conference on Intelligent Systems and Robotics*, Putrajaya Marriott Hotel, IOI Resort, KL, 20-21 May 2003.
46. Dyg. Norhayati Abg. Jawawi, Safaai Deris, Rosbi Mamat, "Evaluation of Real-time Operating System for Small-scale Embedded Systems", *Proc. of Malaysian Science and Technology Congress'98*, Pulau Pinang, 10-11 November 1998.

7.4. Articles and Technical Reports

1. Dayang Norhayati Abang Jawawi, Rosbi Bin Mamat, Shahida Binti Sulaiman, Noraniah Binti Mohd Yassin, Adham Bin Isa, Radziah Binti Mohamad, Noraini Binti Ibrahim, Afrizanfaizal Bin Abdullah, Shahliza Binti Abd Halim, Masitah Binti Ghazali, Mohd Zulkifli Bin Mohd Zaki, "A Component-Based Mobile Robotics Application Toolbox For Teaching Programming Skill", Research Project Final Report, GUP 2016.
2. Dayang Norhayati Abang Jawawi, Imran Ghani, Muhammad Shafie Bin Abd Latiff, "Development of Agile Transition Model for Non-Agile IT Organizations", Research Project Final Report, GUP 2016.
3. Dayang Norhayati Abang Jawawi, Rosbi Bin Mamat, Masitah Binti Ghazali, Mohd Zulkifli Bin Mohd Zaki, Mohd Adham Bin Isa, "Component-based Software Engineering Approach for Automated Embedded Precision Farming Systems", Research Project Final Report, eScienceFund 2015.
4. Dayang Norhayati Abg. Jawawi, and Rosbi Mamat, "Dayang Norhayati Abang Jawawi, Shahida Sulaiman, Rosbi Bin Mamat, Mohd Adham Bin Isa, Afrizanfaizal Bin Abdullah, Nor Azizah Binti Sa'adon, Muhamad Najib Bin Zamri", Research Project Final Report, KEJORA 2014.
5. Dayang Norhayati Abg. Jawawi, and Rosbi Mamat, "A Scheduling Analysis Framework for Predicting the Weakly Hard Real-Time Tasks Performance", Research Project Final Report, FRGS 2011.
6. Dayang Norhayati Abang Jawawi, Simba Anak Bau "Software Process for Integrated Pattern Oriented Analysis and Design (POAD) and Component Programming (COP) On Embedded Real-Time System", Research Monograph, Universiti Teknologi Malaysia, 2006. (ISBN: 978-967-353-659-7)
7. Dayang Norhayati Abang Jawawi, Azizie Binti R. Abd. Aziz "Kajian Ke Atas Peralatan yang Menyokong Analisa Penjadualan dalam Sistem Masa Nyata", Research Monograph, Universiti Teknologi Malaysia, 2006. (ISBN: 978-967-353-744-8)
8. Dayang Norhayati Abang Jawawi, Wan Rusila Binti Wan Zulkifeli "Kajian Penggunaan Corak Reka Bentuk Masa Nyata Dalam Pembangunan Sistem Nyata Masa Berasaskan Metodologi Pattern Oriented Analysis and Design (POAD) Dan Rapid

- Object-Oriented Process for Embedded Systems (ROPES)*", Research Monograph, Universiti Teknologi Malaysia, 2006. (ISBN: 978-967-353-755-6)
9. Dayang Norhayati Abang Jawawi, Koh Kai Hong "*Research on Component-Based Development For Developing A Healthcare Information System*", Research Monograph, Universiti Teknologi Malaysia, 2008. (ISBN: 978-967-354-007-5)
 10. Dayang Norhayati Abg. Jawawi, Radziah Mohamed, Safaai Deris, Rosbi Mamat, Mohd Adib Sarijari and Mohamad Amir Shamsudin "Framework for Component-Based Software Engineering of Embedded Software in Resource Constrained Real-Time Systems", Research Project Final Report, ScienceFund 2009.
 11. Dayang Norhayati Abg. Jawawi, Radziah Mohamed, Safaai Deris, Shahliza Abd. Halim and Rosbi Mamat, "Generative Reuse Approaches for Component-Based Software Engineering", Research Project Final Report, FRGS 2007.
 12. Dayang Norhayati Abg. Jawawi, Safaai Deris, Rosbi Mamat, Radziah Mohamed and Mohd Ridzuan Ahmad, "Experimental Evaluation of Hybrid Software Engineering Methodology for Embedded Firmware Development on Intelligent Mobile Robot", Research Project Final Report, Short Term Grant 2004.
 13. Dayang Norhayati Abg. Jawawi, "Some Issues and Challenges in Component-Based Software Engineering", Software Engineering Buletin, Department of Software Engineering, Universiti Teknologi Malaysia, bil. 1/2003, 6-7, 2003.
 14. Rosbi Mamat and Dayang Norhayati Abang Jawawi, "Keynote – Computational Intelligence in Mobile Robot Applications", *Software Engineering Department Conference on Bioinformatics and Computational Intelligence*, Faculty of Computer Science & Information Systems, UTM, 20 September 2003.
 15. "Logo", Ensaiiklopedia Sains Teknologi, UTM-Dewan Bahasa, 1997.
 16. "Carta Berstruktur", Ensaiiklopedia Sains Teknologi, UTM-Dewan Bahasa, 1997.

8. SUPERVISION

8.1. Supervision of Post-graduate Project by Research

PhD by Reaserch Candidate:

Completed

1. Rabatul Aduni Binti Sulaiman, "Cost-Effective Model-Based Test Case Generation and Prioritization for Software Product Line", 2016 – 2020 (Main-Supervisor).
2. Muhammad Dhiauddin Mohamed Suffian, "A Prediction Model for System Testing Defects Using Prior Phases Metrics", 2017 – 2020. (Main-Supervisor).
3. Habibah Binti Ismail, "Hybrid Approach based on Partitioned and Global Scheduling for Weakly Hard Real-Time Tasks", 2013 – 2019. (Main-Supervisor).
4. Karzan Wakil, " Adaptive Model For Web Engineering Methods to Develop Multi Web Applications in Agile Environment ", (Main Supervisor). 2014-2019.
5. Muhammad Arif Shah, "Missing Data Imputation, Optimization and Localized Software Development Effort Estimation", 2016–2019 (Main-Supervisor).

6. Muhammad Younas "Methodology for Eliciting Non-Functional Requirements In Agile Development Using Cloud Computing", 2016-2019 (main-Supervisor)
7. Mojtaba Raeisinejaddobuneh, "Hybrid and Dynamic Static Criteria Models for Test Case Prioritization of Web Application Regression Testing", 2011 - 2018 (main Supervisor).
8. Syed Razaqat Hussain Shah Kazmi, "Effective Regression Test Case Selection Technique using Weighted Average Scoring" , 2015-2018 (main-Supervisor).
9. Abu Bakar Elsafi Ali Ahmad, "Model-Based Integration Testing Technique using Formal Finite State Behavioral Models for Component-Based Software", 2011 - 2017. (main Supervisor)
10. Adila Firdaus Binti Arbain, "Non Functional Requirement Traceability in Agile", 2013 – 2017. (Co-Supervisor).
11. Awad Ali Abdelrhim Omar, "Architecture-Based Reliability Analysis Approach for Components-Based Software", 2012 - 2016 (main Supervisor)
12. Abdelzahir Abdelmabaud Rahama Alnaour, "Architecture and Model to Improve Application Scalability and Performance of Federated Cloud", 2016 (main Supervisor)
13. Shahliza Abd Halim, "Generative Reuse in Software Product-Line", 2006 - 2016. (co-supervisor)
14. Muhammad Imran Babar, "Value-Based Framework for Stakeholders Quantification", 2012-2015 (Co-Supervisor)
15. Abid Mehmood, "Aspect-Oriented Model-Driven Code Generation Approach for Integration of Aspect Orientation and Model-Driven Engineering", 2011 - 2014. (main-supervisor)
16. Mohd Adham Isa, "Model-Driven Performance Engineering for Wireless Sensor Networks (WSNs)", 2010 - 2013. (main-supervisor).
17. Vahid Khatibibardsiri, "Presenting A New Approach for Accurate Software Cost Estimation", 2010 - 2013. (main-supervisor).
18. Alawi Abdullah Ahmed Al_Sagaf, "Performance measurement in service level agreement for service-oriented architecture systems using model testing", 2008 - 2013. (main-supervisor).
19. Muhammad Waqar Aziz, "Service Oriented Analysis and Design Methodology for Distributed Embedded Real-Time System", 2009 - 2013. (co-supervisor)
20. Siti Normaini, "An Embedded Interval Type2 Fuzzy-Neural Controller Based on Weightless Neural-Network for Mobile Robot", PHD student, 2008 - Aug 2011. (co-supervisor)

On-Going

1. Eglal Mohammed Khalifa Osman, "Interoperability Testing of a Secure Access Control Policy", 2011 - now. (Main-supervisor)
2. Falak Sher, "A Scalable Multi-Aspects Technique for Requirement Prioritization", 2012 - now (Main Supervisor)

3. Rooster Anak Tumeng, "Traceability Technique to Support Test Prioritization of Regressed Software", 2017-Now (Main-Supervisor).
4. Ako Abubakr Jaafar, "Interoperable Semantic Framework for Internet of Thing", (Main Supervisor).
5. Muhammad Khatibsyarbini Abd Rahim, "Toward Effective Clustering Test Case Prioritization for Regression Testing" Feb 2019-now. (Co-Supervisor).
6. Ayman Jalal Hasan Al Mutlaq, "An Improved Localized Software Effort Estimation Based on Missing Data Imputation and Feature Optimization", Aug 2018-now. (Main Supervisor).
7. Azlina Binti Narawi, "A Hybrid Approach for Rainfall Forecasting", Oct 2019-now. (Main Supervisor).
8. Huda Ghalib Ali Iskandar, "Amyotrophic Lateral Sclerosis Progression Prediction Model Based on Deep learning", Nov 2020-Now (Main-Supervisor).

Masters by Reaserch Candidate:

Completed

1. Muhammad Irsyad Kamil, "A Hybrid Technique in Regression Testing", Sep 2019-Now. (Main-Supervisor)
2. Nurul Nazihah Jamal, "Adaptive Learning Model for Learning Computational Thinking Through Educational Robotics", Sep 2019-Now. (Main-Supervisor)
3. Ain Balqis MD Mor Basmmi, "Core Asset Services Development Approach Through Service Oriented Product Line for Healthcare Domain", Sep 2019-Now. (Co-Supervisor)
4. Suzila Binti Sabil, "Component-Oriented Development Method for Embedded Real Time Software", MSc student, Dec. 2007 - Nov. 2010. (main-supervisor)
5. Mohd Zulkifli Bin Mohd Zaki, "A Combination of UML for Marte and Component-Based Development Methodology for Modeling Embedded Real-Time System", Dec 2008 – Sept 2012. (main-supervisor).
6. Yavuz Selim, "Real-Time UML Model and RMA Integrated Approach for Schedulability Analysis of Real-Time Systems", July 2008 – Jan 2011. (main-supervisor)
7. Habibah Binti Ismail, "A Scheduling Analysis Framework for Predicting the Weakly Hard Real-Time Tasks Performance", Dis. 2009 - 2013. (main-supervisor)
8. Rooster Anak Tumeng, "Test Case Prioritization Upon Varying Requirements for Critical Software", Sept 2014 – Jan 2016. (Main-Supervisor).
9. Muhammad bin Sahak, "Efficient Test Case Prioritization Technique for Product in Software Product Lines", 2015-2018. (Main-Supervisor).
10. Faten Alia Zainal Abidin," Agile Transition Model Based on Human Factors", 2016-2018. (Main-Supervisor)
11. Nur Syafiqah Zahirah Bt Abdul Rahman, "Model Based Test Case Generation and Prioritization", Sept 2014 – 2018. (Main-Supervisor)
12. Muhammad Khatibsyarbini Abd Rahim, "A Study of Test Case Prioritization Technique Based on String Distance Metrics" Sept 2016-2018. (Co-Supervisor).

13. Safwan Bin Abd Razak, "Prioritization Approach In Handling Large Software Product Line", 2015-2020. (Co-Supervisor)

On-Going

1. Muhammad Syafiq bin Abdul Manan, "Enhance History-Based Test Case Prioritization using 2-Way Test Generation in Regression Testing", Oct 2020 - Now. (Main-Supervisor)

13.1. Supervision of Postgraduate Dissertation by Mixed Mode

1. Hamsa Naji Nsaif Al-Sammarraie, "Black Hole Algorithm For T-Way Test Suite Generation", Sesi 2-2018/2019 & Sesi 1-2019/2020
2. Hussam Mohamed Bashir Mohamed Ali, Model-Based Semi-Automated Test Case Generation Approach Using UML Diagrams, Sesi 2-2017/2018, Sesi 1-2018/2019 & Sesi 2-2019/2019
3. Iman Tarig Nasr Abdelrahman, "Factors Influencing e-Learning Invironment for Improving Software Engineering Education in Sudan", Sesi 2-2017/2018 & Sesi 1-2018/2019.
4. Ushananthny Suvelayutnam, "Reusable Patent Navigation Software Architecture using Software Product Line Approach", Sesi 2-2017/2018.
5. Harvinder Kaur A/P Rajinder Singh, "Improvement on Label Production Software Quality with Test Class Standardization using XP Technique", Sesi 2-2017/2018.
6. Chester Laurence Barcelon Tan, "Software-in-the-Loop Testing for Product Testing Software in Label Test Process", Sesi 2-2017/2018.
7. Yap Lik Ping, "The Improvement of Manufacturing Transition Process for Production", Sesi 2-2017/2018.
8. Siti Noraini binti Mohamad Ekssan, "Educational Robotics Future Model with Pegagogical Element in Software Product Line", Sesi 1-2016/2017.
9. Farrahin binti Maidin, "Enhancement of BAT Tesing Technique for Software Product Line", Sesi 1-2016/2017
10. Norhidawani Mohamed, "Smart Learning Framework to Support Soft Skills", Sesi 2-2015/2016
11. Nur Athirah Binti Omar, "Component Based Software Realibility Analysis Approach for Embedded Precision Farming Systems", Sesi 1-2015/2016.
12. Nur Fatimah As-Sahra, "Prioritization of Generated Test Cases Using Sequence Diagram and Labeled Transition Systems for Regression Testing", Sesi 1-2014/2015.
13. Hosein Abedinpourshotorban, "Branch Coverage Test Case Generation by The Means of Genetic Algorithm", Sesi 1-2014/2015.
14. Ahmed Sheikh Abdullahi Madey, "An Enhancement of Slicing Test Algorithm for Integration Testing of Embedded system, Sesi 2-2012/13.
15. Ashvini Devi A/P Krishnan, "Systematic Secure Design Guideline to Improve Integrity and Availability of System Security", Sesi 1-2012/13.

16. Nansukusa Yudaya, "An Enhanced Test Case Generation Technique Using Activity Diagram for System Testing", Sesi 1-2011/12, Sesi 1-2012/13.
17. Ako Abubakr Jaafar, "Improving Service Reusability Using Enterprise Service Bus and Business Process Execution Language", Sesi 1-2011/12, Sesi 1-2012/13.
18. Amir Hossein Safi, "Redundant-Free Web Service Composition with User Requirements Consideration", Sesi 1-2011/12, Sesi 1-2012/13.
19. Karzan Wakil Said, "Enhancement for UML-Based Web Engineering for The Development of Homepages", Sesi 1-2011/12, Sesi 1-2012/13.
20. Norazian bt Mohd Hamdan, "System and Software Architecture of Precision Farming based on Wireless Sensor Network", Sesi 1-2010/11, Sesi 2-2011/12.

13.2. **Supervision of Postgraduate Project by Course**

1. Nurirdayu Binti Azmi, "Sistem Tempahan Jahitan Dan Jualan Baju Fesyen Muslimah Atas Talian (A.I Stylista)", Sesi 1-2012/13, Sesi 2-2012/13, Sesi 1-2013/2014.
2. Nik Zahirah Binti Ismail, "Sistem Percetakan Virtual (Fast Print)", Sesi 1-2012/13, Sesi 2-2012/13.
3. Nurulhana binti Sulaiman, "Sistem Pengawalan Berkomputer Di Ladang Cendawan", Sesi 1-2010/11 – Sesi 1-2012/13.
4. Mahmood Aghajani Siroos Talab, "Code Generation for Embedded Real-Time System", Sesi 1-2009/10, Sesi 2-2009/10, Sesi 1-2010/11.
5. Mohd Rizali bin Md Masri, "Integrated Monitoring and Management Systems (IMMS)", Sesi 2-2009/10, Sesi 2-2010/11.
6. Mohd Adham Isa, "Enhancement of Rapid Object Process for Embedded System (ROPES) to Support Pattern Oriented Development", Sesi 2-2008/9, Sesi 1-2009/10. (Main-supervisor)
7. Simba anak Bau, "Software Process for Integrated Pattern-Oriented Analysis & Design (POAD) and Component-Oriented Programming (COP) for Embedded Real-Time Systems", Sesi 2-2007/08, Sesi 1-2008/09.

9. PROFESSIONAL MEMBERSHIP

1. Malaysia Board of Technologies, 2018 - now.
2. Malaysian Software Engineering Interest Group (MYSEIG), 2006 - now.
3. IEEE Member 2008 - now
4. International Association of Engineers (IAENG) member 2011 - now (the IAENG Society of Computer Science, the IAENG Society of Scientific Computing, the IAENG Society of Software Engineering)
5. Malaysian Software Testing Hub, 2012 – now
6. Malaysian Invention and Design Society (MINDS), 2013 – now

10. AWARDS

1. Best Presenter Award - for Artificial Intelligence category (iMEDiTEC 2021): Conference. Universiti Teknologi Malaysia, 29-30 June 2021.
2. Winner for undergraduate poster competition category signal processing (iMEDiTEC 2021): Exhibition & Competition. Universiti Teknologi Malaysia, 29-30 June 2021.
3. Gold Award - Adaptive Learning Management System for Learning Computational Thinking Through Educational Robotics, New Academia Learning Innivation (NALI 2021): Exhibition & Competition. UTMLead, Universiti Teknologi Malaysia, 6-8 December 2021.
4. Gold Award - Collaborative Learning Approach for Teaching Computational Thinking Using Mobile Robot During Pandemic, New Academia Learning Innivation (NALI 2021): Exhibition & Competition. UTMLead, Universiti Teknologi Malaysia, 6-8 December 2021.
5. Gold Award - Industry-Infused Curriculum in Computing Education for Future Ready Graduates, New Academia Learning Innivation (NALI 2018): Exhibition & Competition. Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, 18 September 2019.
6. Anugerah Kecemerlangan Perkhidmatan for 2018, Majlis Anugerah Gemilang Fakulti Kejuruteraan, 28 Nov 2019.
7. Anugerah Buku Karya Asli, Kategori Sains dan Teknologi untuk tahun 2018, Majlis Anugerah Kecemerlangan & Penghargaan UTM 2019.
8. Anugerah Penulis Dalam Jurnal Berindeks 2018, Category Faculty of Engineering, School of Computing, UTM. 17 July 2019.
9. Excellent Award - The Most Active Teachers using The Blended Learning – Course SCSJ4423 Session 2018/2019, Universiti Teknologi Malaysia. 2019.
10. Finalis kategori pengalaman pembelajaran imersif (bersemuka), Anugerah Khas YB Menteri Pendidikan Malaysia Rekabentuk Kurikulum dan Penyampaian Inovatif tahun 2019 (AKRI2019), 11-12 September 2019.
11. Best Paper Research Award – Sustainable & Integrated Engineering International Conference 2019, 8-9 December 2019.
12. Excellent Award - The Most Active Teachers using The Blended Learning – Course MCSS1023-01 and SCSJ4423 Session 2017/2018, Universiti Teknologi Malaysia. 29 June 2018.
13. Bronze Award, New Academia Learning Innivation (NALI 2018) Exhibition & Competition, 25-26 September 2018, UTM, Asia Technological University Network (ATU-Net).
14. Anugerah Buku Negara 2107, Kategori Pengajian Tinggi, Buku Sains dan Teknologi Terbaik.
15. Silver Medal, at iPhex Innovative Practices in Higher Education Expo 2017 (I-PHEX 2017), 16 November 2017.
16. Best Paper Research Award Postgraduate Research Workshop@SOFTEC Asia 2017, September 2017.

17. Silver Medal, at iPhex Innovative Practices in Higher Education Expo 2016 (I-PHEX 2016), 11 August 2016.
18. Universiti Teknologi Malaysia Excellent Service 2016
19. Gold Award, Invention, Innovation & Design on E-Learning (IIDDEL), at National University Carnival on e-Learning (NUCEL 2015).
20. The Most Active Teachers using The Blended Learning – Course SCSJ1023-02 Session 2014/2015, Universiti Teknologi Malaysia.
21. Excellent Award - The Most Active Teachers using The Blended Learning – Course SCSJ4423-01 Session 2014/2015, Universiti Teknologi Malaysia.
22. The Most Active Teachers using The Blended Learning – Course MCSS1023-01 Session 2014/2015, Universiti Teknologi Malaysia.
23. Best Paper Research Award Postgraduate Research Workshop@SOFTEC Asia 2015, 7th September 2015.
24. Excellent Service Award 2014, Faculty of Computing, UTM.
25. Community Service Award 2014, Faculty of Computing, UTM.
26. Publication (Other Publications) Award 2014, Faculty of Computing, UTM.
27. Faculty of Computing, UTM Excellent Service 2013.
28. Best Paper Award The 7th Malaysian Software Engineering Conference (MySEC2013), 20-21 November 2013.
29. Silver Medal, at PECIPTA International Conference and Exposition on Invention of Institutions of Higher Learning, (PECIPTA2013), 7-9 November 2013.
30. Universiti Teknologi Malaysia Excellent Service 2011
31. Gold Award, at the Art and Technology Exhibition 2012 (INATEX2012), 3rd - 5th October 2012.
32. Pengiktirafan dalam Penyelidikan dan Pembangunan (R&D) di peringkat Kebangsaan dan Antarabangsa.
33. Best paper the 3rd Software Engineering Postgraduate Workshop 2010 (SEPoW2010).
34. Gold Medal, the Malaysian Technology Expo 2010 (MTE2010), 4-6 February 2010.
35. Gold Award, at the 11th Art and Technology Exhibition 2009 (INATEX2009), 21st -23rd October 2009.
36. Best Poster Award in 2008 Regional Student Conference on Research Development (SCOReD2008), IEEE Malaysia.
37. Universiti Teknologi Malaysia Excellent Service 2007.
38. Best Robotics Paper Award in International Conference on Control, Instrumentation and Mechatronics Engineering 2007 (CIM'07).
39. Merit Award (Doctor of Philosophy) on excellent academic program 2007.
40. Best Presenter Award in FSKSM Postgraduate Annual Research Seminar 2006 (PARS's 06).
41. Best Poster Award in FSKSM Postgraduate Annual Research Seminar 2006 (PARS's 06).
42. Best Paper Award in FSKSM Postgraduate Annual Research Seminar 2005 (PARS's 05).
43. Best Paper Award in First Malaysian Software Engineering Conference (MySEC'05).
44. Universiti Teknologi Malaysia Excellent Service 2002.

45. Excellent Service 2000, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia.

11. OTHER ACTIVITIES

11.1. Academic Program External Examiner/Advisor

1. Faculty of Information Science & Technology, Universiti Kebangsaan Malaysia, 2021-2023.
2. Faculty of Information and Communication Technology (FTMK), Universiti Teknikal Malaysia Melaka (UTeM), 2021-2023.
3. Department of IT, Faculty of Management & Business Technology, Kuala Lumpur Metropolitan University Collage, 2016- 2018.
4. Faculty of Industrial and Technology Management, Kolej Yayasan Pahang, 2018.
5. Faculty of Computer Science and Information Technology, Universiti Malaysia Sarawak (UNIMAS), 2017-2018, 2019 - 2020.

11.2. Thesis External Examiner

1. Shabana Ramzan, "Transformation of Relational Database into Oracle NoSQL Key-Value Store", PhD thesis, The Islamia University of Bahawalpur, Pakistan, 2019.
2. Muhammad Hamid, "Intelligent Recommender and Decision Support System for Effective Management of Software Projects", PhD thesis, National College of Business Administration & Economics, Pakistan, 2019.
3. Saima Munawar, "Pedagogical Agent-Based Cognitive Architecture for Intelligent Virtual Laboratory Learning Environment", PhD thesis, National College of Business Administration & Economics, Pakistan, 2019.
4. Nik Aisyah binti Nurhadi, "Domain Specific Modeling Language for Strategy Educational Games and Transfer Learning Theory (SEGL)", Master thesis, Computer and Information Sciences Department, Universiti Malaysia Petronas, 2018.
5. Ariful Haque, "An Experimental Study of Neighborhood Based Meta-Heuristic Algorithms for Test Case Generation Satisfying the Modified Condition/Decision Coverage Criterion", Master thesis, Faculty of Computer Systems & Software Engineering, Universiti Malaysia Pahang, 2017.
6. Anantha Raman G R, "A Demand on the Fly Multi Level Graph Based Dynamic Location Based Service Selection for QoS Development in Cloud Environment using A3 Measures", PhD thesis, Faculty of Information and Communication Engineering, Anna University, India, 2017.
7. Sarah Abdulkarem AbdulazizAl-Shalif, "Improving the Accuracy of COCOMO II using an Artificial Neural Network with Hyperbolic Tangent Activation Function", Master thesis, Faculty of Computer Science & Information Technology, Universiti Tun Hussein Onn Malaysia, 2017.

8. Amal Abdulghany Qaseem Al-Shargabi (2009318751), "Task-based Program Comprehension Framework for Novices", PhD thesis, Fakulti Sains Komputer dan Matematik, Universiti Teknologi MARA, 2016.
9. Hisham S. M. Khair (P58735), "Software Process Meta-Modelling: An Approach for Defining and Representing the Software Engineering Process", PhD thesis, Fakulti Teknologi dan Sains Maklumat, Universiti Kebangsaan Malaysia, 2015.
10. Mustafa Ahmed Abdullah Aqel Al-Matary (P44182), "Design an Implementation of Block Store to Support Block Based Software Development Methodology", PhD thesis, Fakulti Teknologi dan Sains Maklumat, Universiti Kebangsaan Malaysia, 2014.
11. Siti Nor Asikin Binti Kamalzaman, "A Model for Managing and Tracking Modification Requests in Web Application", Master thesis, Universiti Sains Malaysia 2013.
12. Pooh Kian Wah, "A Component-Oriented Approach for Developing a Mobile Financial Application System", Master thesis, Universiti Malaya, 2008.

11.3. Keynote Address/Invited Speaker

1. Invited speaker, "Nurturing Computational Thinking Skills: An Adaptive Approach", The 5th International Conference on Algorithms, Computing and Systems (ICACS 2021), Xi'an, China, September 24-26, 2021.
2. Keynote Speaker, International Virtual Conference Of Emerging Trends In Computing And Software Engineering2021, May 21 to 22, 2021, ILMA University, Pakistan, organized by Korean Society For Internet Information.
3. Keynote Speaker, "Computational Thinking through Educational Robotics", The 12th International Conference on Internet (ICONI 2020), 13-16 December 2020, Jeju Island, Korea, organized by Korean Society For Internet Information.
4. Invited speaker, "Software Engineering Education for a Changing World", International webinar of Engineering Software for the Modern Challenges (ESMoC) 2020, organized by The Islamia University of Bahawalpur, Pakistan, 05 Sept. 2020.
5. Invited speaker, "Lessons Learned: Online Teaching & Learning", organized by Centre for Applied Learning And Multimedia (CALM), UNIMAS, 18 June 2020.
6. Keynote Speaker, "Educational Robotics in Computing Education", The Joint Conference on Green Engineering Technology & Applied Computing 2020, International Conference on Applied Computing (ICAC2020), 4-5 February 2020, Bangkok, Thailand, organized by UniMap and UTM.
7. Invited speaker, "Alternative Assessment", organized by Centre for Applied Learning And Multimedia (CALM), UNIMAS, 24 April 2019.
8. Invited speaker, "Non written assessment", organized by Faculty of Computer Science and Information Technology, UNIMAS, 13 August 2018.
9. Invited speaker, "Nurturing Computational Thinking through Educational Robotics", International Conference on Science, Technology, Engineering and Mathematics Education (ICSTEM), 2 - 3 October 2018, organized by organized by Universiti Teknologi Malaysia (UTM) and the Ministry of Education Malaysia.
10. Invited speaker, PRIDE the Premier IHL Sharing Session (University-Digital Industry) 5 April 2018, organized by Malaysia Digital Economy Corporation (MDEC).
11. Invited speaker, "Adaptation of Project-Oriented Problem-Based Framework for Teaching Computer Programming", Organized by World Engineering Education

- Forum 2017, 16 November 2017, Kuala Lumpur, organized by International Federation of Engineering Education Societies and Society of Engineering Education Malaysia.
- 12 Invited speaker for Curricular Service Learning Session, the 6th Regional Conference on Engineering Education 2016 (RCEE2016), 9-10 August 2016- Universiti Teknologi Malaysia, Kuala Lumpur.
 - 13 Keynote Speaker, "A Smart Learning Education Project for Generic Skills Development", The 7th International Conference on Internet (ICONI 2015), 13-15 December 2015, Grand Millennium Hotel, Kuala Lumpur, Malaysia, organized by Korean Society For Internet Information.
 - 14 Invited speaker, "iCare My Aim: Ceramah Hala Tuju ke Pengajian Tinggi", School Holiday Programs, 19 March 2015, Organized by Perbadanan Perpustakaan Awam Johor Cawangan Bandar Penawar.
 - 15 Invited speaker, "Informatik Pendidikan: iCare My English & Halatuju Pengajian Tinggi: iCare My Aim", iCare workshop, SMK Bandar Mas, Kota Tinggi, Johor, 13 August 2015, Organized by UTM & KEJORA.
 - 16 Invited speaker, "iCare My English: Towards Tertiary Education", iCare workshop, Mini RTC, Bukit Raja, Pengerang, Johor, 17 Disember 2014, Organized by UTM & KEJORA.
 - 17 Invited speaker, "English for Science and Technology: How to be Creative & Innovative", Learning English Camp Fun Environment, Savannah Hill, Ulu Tiram, 28 August 2014, Organized by KEJORA.
 - 18 Invited speaker, "Pendedahan Etika dan Keselamatan Aktiviti Dalam Talian", IEEE-iCARE-PEKA workshop, Dewan Bandaran, Bandar Penawar, Johor, 23 October 2013, Organized by IEEE, UTM & KEJORA.
 - 19 Invited speaker, "My Aim", iCare workshop, Dewan Seminar, Kolej Profesional Mara, Bandar Penawar, 23 Oktober 2012, Organized by UTM & KEJORA.
 - 20 Invited speaker, "Quality Software for Quality Life", Software Engineering Seminar, 15th October 2011, Organized by Universiti Teknikal Malaysia Melaka (UTEM).
 - 21 Plenary Lecture-Invited speaker, "Component-Based Software Engineering of Embedded Software in Resource Constrained Real-Time Systems", Brown Bag Seminar, 17 April 2008, Motorola, Penang.